DOCUMENT RESUME

ED 262 472 EA 018 019

AUTHOR	Gerald, Debra E.
TITLE	Projections of Education Statistics to 1992-93. Methodological Report with Detailed Projection Tables.
INSTITUTION	National Center for Education Statistics (ED), Washington, DC.
REPORT NO	NCES-85-408
PUB DATE	Jul 85
NOTE	107p.
AVAILABLE FROM	Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402 (GPO Stock No. 065-000-00238-8; $3.50).
PUB TYPE	Statistical Data (110) -- Reports - Research/Technical (143)
EDRS PRICE	MF01/PC05 Plus Postage.
DESCRIPTORS	College Faculty; Degrees (Academic); Early Childhood Education; Elementary Secondary Education; Enrollment Projections; Enrollment Trends; Futures (of Society); High School Graduates; Postsecondary Education; *Prediction; *Research Methodology; *School Statistics; *Tables (Data); Teachers; Teaching (Occupation); *Trend Analysis
IDENTIFIERS	National Center for Education Statistics

ABSTRACT

This document describes the techniques and assumptions used by the National Center for Education Statistics to prepare the statistical projections used in the center's reports, and it presents many of the resulting projections in tabular form. The report covers projections in key areas of educational statistics, including enrollments, high school graduates, earned degrees, and characteristics of instructional staffs in elementary, secondary, and higher education. The report covers this material in three basic sections. The first section, composed of five chapters, describes the statistical universe for each series of projections, the basic asumptions underlying each projected series, methods used to make estimates for missing data in past time series, data used in making projections, and information on the accuracy of past projections. The second section, Appendix A, contains tables of demographic time series data used to produce the projections. The third section, Appendix B, presents detailed projections of enrollments, high school graduates, earned degrees, and instructional staffs. The table of contents lists each of the chapters and the 66 tables, some of which consist of clusters of sub-tables. A glossary defining the terms used to identify types of degrees, enrollment conditions, instructional staff status, and schools is presented as Appendix C. (PGD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED262472

Projections of Education Statistics to 1992-93

Methodological Report with Detailed Projection Tables

EA 018 019

National Center for Education Statistics

Projections of Education Statistics to 1992-93

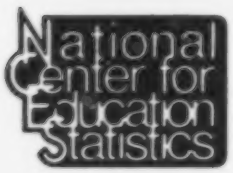
Methodological Report with Detailed Projection Tables

Debra E. Gerald
National Center for
Education Statistics

U.S. Department of Education
William J. Bennett
Secretary

Office of Educational Research and Improvement
Emerson J. Elliott
Acting Assistant Secretary

National Center for Education Statistics
Emerson J. Elliott
Administrator



National Center for Education Statistics

"The purpose of the Center shall be to collect and disseminate statistics and other data related to education in the United States and in other nations. The Center shall . . . collect, collate, and, from time to time, report full and complete statistics on the conditions of education in the United States; conduct and publish reports on specialized analyses of the meaning and significance of such statistics; . . . and review and report on education activities in foreign countries."--Section 406(b) of the General Education Provisions Act, as amended (20 U.S.C. 1221e-1).

July 1985

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402

FOREWORD

The 1985 edition of *Projections of Education Statistics to 1992–93: Methodological Report with Detailed Projection Tables* presents the assumptions and methods used to develop projections, examines the accuracy of past projections, and provides detailed projections of statistics for elementary and secondary schools and institutions of higher education.

For most of the time series shown in this report, low, intermediate, and high alternative projections are presented. These are based on three alternative sets of explicitly stated assumptions. Although the intermediate projections are the "preferred" set, the low and high alternatives offer a range of posssible future outcomes.

John B. Lyons
Assistant Administrator for
Statistical Services

Jay Noell
Chief, Statistical
Information Branch

ACKNOWLEDGMENTS

The *Projections of Education Statistics to 1992-93: Methodological Report with Detailed Projection Tables* was prepared by the National Center for Education Statistics (NCES) in the Division of Statistical Services under the supervision of John B. Lyons, Assistant Administrator for Statistical Services, and Martin M. Frankel, Acting Chief of the Statistical Information Branch.

Debra E. Gerald was responsible for the development and preparation of the report. Martin M. Frankel developed the projections of instructional staff shown in the appendix and Audrey C. Weinberg prepared the methodological chapter on instructional staff in educational institutions. Charlene Hoffman and Celeste Loar were responsible for the development and verification of statistical tables.

Valuable assistance was also provided by others within NCES. Gail Usher was responsible for the editorial review and Philip H. Carr, graphic artist, designed the format and cover. Laverne Holland, Laquetta Smallwood and Carmelita Stevenson were responsible for typing the tables and the manuscript.

CONTENTS

FOREWORD 1

INTRODUCTION IX

CHAPTER 1 General Projection Methodology 1
by Debra E. Gerald

CHAPTER 2 Enrollment 4
by Debra E. Gerald

CHAPTER 3 High School Graduates and Earned Degrees 18
by Debra E. Gerald

CHAPTER 4 Instructional Staff 24
by Audrey C. Weinberg

CHAPTER 5 Accuracy of NCES' 1966-82 Projections 29
by Debra E. Gerald

APPENDIX A Statistical Tables 33

APPENDIX B Detailed Projection Tables 42

APPENDIX C Glossary 82

Figure

1. General Structure and Methodology of the Interactive Forecasting Model (IFMOD) 5

List of Tables

Enrollment

1. Nursery and kindergarten enrollment rates, with alternative projections, by age and sex: Selected years, 1972 to 1992 8
2. Elementary enrollment rates, with projections, by age and sex: Selected years, 1972 to 1992 8
3. Secondary enrollment rates, with projections, by age and sex: Selected years, 1972 to 1992 9
4. College enrollment rates, with alternative projections, by age, sex, and attendance status: Selected years, 1972 to 1992 10
5. Enrollment rates in nursery schools and kindergartens, with projections, by age and sex of student and by control of institution: Selected years, 1972 to 1992 11
6. Enrollment rates in public schools, with projections, by grade level: Selected years, 1972 to 1992 12
6.1 Enrollment rates used to determine alternative projections of enrollment in elementary and and secondary schools, by grade level: 1972, 1977, and 1992 12
7. Public grade retention rates, with projections: Selected years, 1972 to 1992 13
8. Full-time enrollment, by level enrolled and type of institution, as a percent of total enrollment, for each age and sex classification, with projections: 1982, 1987 and 1992 13
9. Part-time enrollment, by level enrolled and type of institution, as a percent of total enrollment, for each age and sex classification, with projections: 1982, 1987 and 1992 14
10. Public enrollment as a percent of total enrollment, by attendance status, sex and level enrolled and by type of institution, with projections: 1982, 1987 and 1992 14
11. Graduate enrollment as a percent of total post-baccalaureate enrollment, by sex and attendance status, and by type and control of institution, with projections: 1982, 1987 and 1992 15
12. Full-time equivalent of part-time enrollment as a percent of part-time enrollment, by level enrolled and by type and control of institution, with projections: 1982, 1987 and 1992 15
13. Enrollment (assumptions) 16
14. Enrollment (estimation methods) 17

Graduates and Degrees

15. High school graduates as a percent of the 18-year-old population, with projections, by sex: Selected years, 1972 to 1992 19
16. High school graduates as a percent of grade 12 enrollment in public schools, with projections: Selected years, 1972 to 1992 19
17. General Educational Development degrees as a percent of population, with projections, by age group: Selected years, 1977 to 1992 19

18. Full-time, fourth-year undergraduate enrollment as a percent of undergraduate enrollment in 4-year institutions, with projections, by sex: 1982, 1987 and 1992 19
19. Equations for bachelor's degrees: 1967-68 to 1981-82 20
20. Equations for master's degrees: 1970-71 to 1981-82 20
21. Equations for doctor's degrees: 1969-70 to 1981-82 21
22. Equations for alternatives of bachelor's and master's degrees 21
23. Graduates and degrees (assumptions) 22

Instructional Staff

24. Equations for classroom teachers 25
25. Replacement (turnover) rates for classroom teachers in regular elementary and secondary schools: 1970 to 1992 26
26. New teacher graduates as a percent of bachelor's degrees: 1970 to 1992 26
27. Ratios and percents used to project total and full-time equivalent senior faculty 26
28. Instructional staff (assumptions) 27
29. Instructional staff (estimation methods) 28

Accuracy of NCES' 1966-1982 Projections

30. Summary of mean absolute percentage errors of projections of selected elementary and secondary education statistics by lead time 31
31. Summary of mean absolute percentage errors of projections of selected higher education statistics by lead time 32

Appendix A—Statistical Tables

A-1 Annual number of births (U.S. Census Projections, Middle Series): 50 States and D.C., 1940 to 1992 33
A-2 Preprimary school-age populations (U.S. Census Projections, Middle Series): 50 States and D.C., 1970 to 1992 34
A-3 School-age populations (U.S. Census Projections, Middle Series): 50 States and D.C., 1970 to 1992 35
A-4 College-age populations (U.S. Census Projections, Middle Series): 50 States and D.C., 1970 to 1992 36
A-5 School-age populations, male, by individual ages 3-15 years: 50 States and D.C., 1970 to 1992 37
A-6 College-age populations, male, by individual ages and age groups 16-34 years: 50 States and D.C., 1970 to 1992 38
A-7 School-age populations, female, by individual ages 3-15 years: 50 States and D.C., 1970 to 1992 39
A-8 College-age populations, female, by individual ages and age groups 16-34 years: 50 States and D.C., 1970 to 1992 40
A-9 Full-time, 4th-year undergraduate enrollment variables used to project bachelor's degrees, with projections, by sex: 1967 to 1992 41
A-10 Full-time graduate enrollment variables used to project master's degrees, with projections, by sex: 1967 to 1992 41

Appendix B—Detailed Projection Tables

Enrollment

B-1 Nursery and kindergarten enrollment, with alternative projections, by age of student and control of school: 50 States and D.C., fall 1970 to 1992 42

B-2 Enrollment in grades K-8 and 9-12 of regular day schools, with projections, by control of institution: 50 States and D.C., fall 1970 to 1992 44

B-2.1 Total enrollment in grades K-8 and 9-12 of regular day schools, with alternative projections: 50 States and D.C., 1982 and 1992 44

B-3 Enrollment in regular elementary and secondary day schools, with projections, by control and organizational level of institution: 50 States and D.C., fall 1970 to 1992 45

B-4 Enrollment in all institutions of higher education, by age, sex, and attendance status of student: 50 States and D.C., fall 1972, 1977, 1982, 1987 and 1992

B-4A With intermediate alternative projections 46

B-4B With low alternative projections 47

B-4C With high alternative projections 48

B-5 Total Enrollment in all institutions of higher education, with alternative projections, by sex and attendance status of student and control of institution: 50 States and D.C., 1970 to 1992 49

B-5A In 4-year institutions 50

B-5B In 2-year institutions 51

B-6 Total enrollment in all institutions of higher education, with alternative projections, by sex and attendance status: 50 States and D.C., 1970 to 1992 52

B-7 Undergraduate enrollment in all institutions, with alternative projections, by sex and attendance status of student and control of institution: 50 States and D.C., 1970 to 1992 53

B-8 Undergraduate enrollment in all institutions, with alternative projections, by sex and attendance status of student: 50 States and D.C., 1970 to 1992 54

B-8A In public institutions 55

B-8B In private institutions 56

B-9 Graduate enrollment in all institutions, with alternative projections, by sex and attendance status of student and control of institution: 50 States and D.C., 1970 to 1992 57

B-10 Graduate enrollment in all institutions, with alternative projections, by sex and attendance status of student: 50 States and D.C., 1970 to 1992 58

B-10A In public institutions 59

B-10B In private institutions 60

B-11 First-professional enrollment in all institutions, with alternative projections, by sex and attendance status of student and control of institution: 50 States and D.C., 1970 to 1992 61

B-12 First-professional enrollment in all institutions, with alternative projections, by sex and attendance status of student: 50 States and D.C., 1970 to 1992 62

B-12A In public institutions 63

B-12B In private institutions 64

B-13 Full-time-equivalent enrollment in all institutions of higher education, by enrollment level of student and type of institution, with alternative projections: 50 States and D.C., 1970 to 1992 65

B-13A In public institutions 66

B-13B In private institutions 67

Graduates and Degrees

B-14 High school graduates and general educational development degrees, with projections, by sex of recipient and control of institution: 50 States and D.C., 1970-71 to 1992-93 68

B-15 Bachelor's degrees, with alternative projections, by sex of recipient: 50 States and D.C., 1970-71 to 1992-93 69

B-16 Master's degrees, with alternative projections, by sex of recipient: 50 States and D.C., 1970-71 to 1992-93 70

B-17 Doctor's degrees, with alternative projections, by sex of recipient: 50 States and D.C., 1970-71 to 1992-93 71

B-18 First-professional degrees, with alternative projections, by sex of recipient: 50 States and D.C., 1970-71 to 1992-93 72

Instructional Staff

B-19 Classroom teachers in regular elementary and secondary schools, with alternative projections, by control and level of institution: 50 States and D.C., fall 1970 to 1992 73

B-20 Teachers per 1,000 pupils in regular elementary and secondary schools, with alternative projections, by control and level of institution: 50 States and D.C., fall 1970 to 1992 75

B-21 Estimated demand for classroom teachers in regular public elementary and secondary schools, with alternative projections: 50 States and D.C., fall 1970 to 1992 76

B-22 Estimated demand for classroom teachers in regular private elementary and secondary schools, with alternative projections: 50 States and D.C., fall 1970 to 1992 77

B-23 Estimated supply of new teacher graduates compared to estimated total demand for additional teachers in regular elementary and secondary schools, with alternative projections: 50 States and D.C., fall 1970 to 1992 79

B-24 Full-time and part-time senior instructional staff in all institutions of higher education, with alternative projections, by control and type of institution: 50 States and D.C., fall 1970 to 1992 80

B-25 Full-time-equivalent senior instructional staff in all institutions of higher education, with alternative projections, by control and type of institution: 50 States and D.C., 1970 to 1992 81

Introduction

Guide to this Edition

This edition of *Projections of Education Statistics to 1992-93: Methodological Report with Detailed Projection Tables* describes the techniques and assumptions used to prepare the projections shown in the appendix of this report and those in other publications of the National Center for Education Statistics. This report describes the statistical universe for each series, the basic assumptions underlying each projected series, methods used to make estimates for missing data in past time series, data used in making projections, and information on the accuracy of past projections. The report covers key education statistics, including enrollments, high school graduates, earned degrees, and instructional staff in elementary and secondary schools and institutions of higher education.

Appendix A contains tables of demographic time series data used to produce the projections; appendix B presents detailed projections of enrollments, high school graduates, earned degrees, and instructional staff; and appendix C is a glossary of terms.

Changes from Past Editions

The projections presented in the appendix are revisions which reflect the 1980 census. The revised population projections developed by the Bureau of the Census reflect the incorporation of the 1980 population estimates and new, higher assumptions for life expectancy and net immigration and new, lower assumptions for fertility rates. As compared to previous population projections based on the 1970 census, these changes resulted in smaller school-age populations and larger college-age and adult populations.

This edition is the first to include a separate chapter on the accuracy of past projections. An evaluation of projections shown in the past 14 editions of *Projections* examined the accuracy of past projections by the number of years projected into the future. The results from this evaluation may be used as indicators of the accuracy of the projections shown in this report.

Another major change is the absence of projections of expenditures in educational institutions. Evaluations of past expenditure projections have indicated that they were not accurate enough to be of real value to policy planners. To a large extent, this was due to a general lack of consistent data on expenditures and related variables which made it impossible to project expenditures accurately.

Caveats

Users of the projections shown in the appendix should review the underlying assumptions in order to evaluate their suitability. Users are also cautioned that projections of time series are subject to errors from both the inherent nature of the statistics themselves and the properties of projection methodologies. Therefore, alternative projections are shown for most statistical series.

CHAPTER 1

General Projection Methodology

Beginning with institutional data from NCES and demographic data from the Bureau of the Census, the basic methodology used throughout *Projections* was to convert the variable to be projected to a percent of a base variable for a number of past years. For each variable or statistical series projected in this report, the general procedure used was to calculate rates for the past 13 years as a percentage of a base variable, such as population or enrollment. These percentages were then projected and applied either to projections of the base variable that were previously projected by NCES or projections available from other sources, such as population projections from the Bureau of the Census.

For example, the number of 18-year-olds enrolled in college was expressed as a percentage of the 18-year-old population from 1967 through 1982. These percentages (enrollment rates) were then projected through 1992 and applied to projections of the 18-year-old population available from the Bureau of the Census. This produced projections of the number of 18-year-olds enrolled in institutions for higher education.

The advantage of converting the variable to be projected to a percent of a base variable is that resultant projections of enrollment, instructional staff, graduates, and degrees are consistent and coordinated. This method ensures that the factors affecting the base variable will also be reflected in the projections of other related variables.

The disadvantage of this method is that projection errors in the base variables (enrollment or population) can contribute to projection errors in related variables. However, projection errors for enrollment and population have been fairly small, therefore, the advantages of the method outweigh its disadvantages.

Nursery and kindergarten enrollment is projected using enrollment rates, by individual ages. Projections of enrollments in elementary and secondary schools are based on a grade-retention or cohort-survival method. This is one of the most commonly used methods and is based on the entrance of 6-year-olds into first grade and their subsequent progress through elementary and secondary school as determined by projected grade-retention rates.

Kindergarten enrollment, 1st-grade enrollments, postgraduate[1] enrollment, and enrollments in elementary and secondary ungraded and special classes are projected separately using enrollment rates. Grades 2 through 12 are projected on the basis of grade retention rates.

Projections of classroom teachers in elementary and secondary schools are based on projected enrollments in these schools. Projections of teacher-pupil ratios are applied to enrollment projections to obtain projections of classroom teachers in elementary and secondary schools.

Projections of enrollments in institutions of higher education were developed by means of the NCES Interactive Forecasting Model (IFMOD), a complex age-specific enrollment rate model. For each age or age group, by sex and attendance status, enrollment rates are calculated and projected into the future. These projected enrollment rates were then applied to age-specific population projections from the Bureau of the Census.

Projections of instructional staff in institutions of higher education are based on projections of staff-student ratios. Since these rates have been fairly stable, they were projected as the average of the most recent rates. The projections of staff-student ratios were then applied to enrollment projections to obtain projections of instructional staff in institutions of higher education.

Projections of high school graduates are based on projections of the 18-year-old population and grade 12 enrollment in public schools. Projections of General Educational Development degrees are based on projections of the school-age and adult populations.

Projections of bachelor's and master's degrees are based on projections of enrollments in institutions of higher education. For example, projections of bachelor's degrees were estimated by means of simple linear regression with

[1]Those pupils who have graduated from the 12th-grade and have re-entered for additional high school courses.

4-year undergraduate enrollment in 4-year institutions as the independent variable.

Projections of doctor's degrees were projected by extrapolating the past time-series trend into the future. Projections of first-professional degrees in the medical fields were obtained from the Bureau of Health Manpower of the Department of Health and Human Services. First-professional degrees in law and theology were projected by using exponential smoothing.

Exponential smoothing and multiple linear regression are the two major projection techniques used. Exponential smoothing is a method in which more weight is placed on recent observations than earlier ones. The weights given to previous observations decrease exponentially as one moves further into the past. As a result, the older the data, the less their influence on the projections. The rate at which the weights of the previous observations decrease is determined by the smoothing constant selected.

In this edition, the concept of a local model was often used instead of a global model to describe the time series to be projected. For a global model, the structure is regarded as highly stable and the chosen model as the truth about the underlying structure of the data. For a local model, the structure is believed to be stable in the short run but not necessarily in the long run.[2] For example, the local constant model was used to project time series when it was believed that the future level would be best approximated by the constant level observed in the recent past. In contrast, a global constant model could be used if it was believed that the average level for all of the past data could best represent the future constant level.

For time series that can be described by a local constant model, single exponential smoothing was used. Under this method, a single constant value is projected for the entire projection period in the following manner:

$$P = aX_t + a(1-a)X_{t-1} + a(1-a)^2X_{t-2} + a(1-a)^3X_{t-3} + \ldots$$

Where

P = projected constant

a = smoothing constant ($0<a<1$)

X_t = observation for time t

The above equation illustrates that the projection is a weighted average based on exponentially decreasing weights. For a high smoothing constant, weights for earlier observations decrease very rapidly. For a low smoothing constant, decreases are more moderate.

For time series that can be described by a local linear model, double exponential smoothing was used. In this method, as the name implies, the smoothed values are themselves smoothed. This results in a forecast for the slope of the projected line that is based primarily on an exponentially decreasing weighted average of the increments of smoothed values.

In general, the projections in this publication are based on relatively high smoothing constants. The farther apart the observations are spaced in time, the more likely are changes in the underlying social, political, and economic structure. Since the observations are on an annual basis, major shifts in the underlying process are more likely to occur within the time span of just a few observations than if the observations were available on a monthly or weekly basis. As a result, the underlying process tends to be unstable from one observation to the next. Another reason for using a high smoothing constant is that most of the observations are fairly accurate, since most are population values rather than sample estimates. Therefore, large shifts tend to indicate changes in the process rather than noise in the data. For those cases in which the observations were considered to be less accurate, lower smoothing constants were used. To develop projections in this report, smoothing constants ranged from 0.09 to 0.4.

Simple linear regression and multiple linear regression were used in making projections primarily in the area of degrees. The latter was used when it was believed that a strong causal relationship existed between the variable being projected (dependent variable) and the independent casual variables. However, this technique was only used when accurate data and reliable projections of the independent variables were available.

Assumptions

All projections are based on assumptions, which to a large extent determine the projections. It is important that users of projections understand the assumptions in order to determine the acceptability of projected time series for their purposes. The tables of assumptions in each chapter describe the primary assumptions upon which the projections of time series are based. For each time series, the respective tables and the assumptions used for each alternative projection are shown.

For most projections, low, intermediate, and high alternatives are shown. These alternatives reveal the level of uncertainty involved in making projections, and they also point out the sensitivity of projections to the assumptions upon which they are based.

Many of the projections in the appendix are demographically based. Bureau of the Census middle series projections of the sizes of various age populations, which reflect the 1980 census, were chosen for use. The future fertility rate assumption is the key assumption in making population projections. The middle series population projections

[2]Warren Gilchrist, *Statistical Forecasting*, John Wiley and Sons, New York (1976), pages 19 and 20.

assume an ultimate complete cohort fertility rate of 1.9 births per woman by year 2050 and a net immigration of 450,000. This assumption plays a major role in determining population projections for the age groups enrolled in nursery school and kindergarten and in elementary grades. The effects of the fertility rate assumptions are more pronounced toward the end of the projection period.

For enrollments in secondary grades and colleges, the fertility assumption is of no consequence, since all students enrolled at these levels throughout the projection period were already born when the population projections were made.

Reliability of Basic Data

This report gives most past enrollment, graduate, and degree figures that are based on annual surveys of the National Center for Education Statistics. In general, these historical counts are adequate. Data on private elementary and secondary enrollment, higher education enrollment by age and attendance status, classroom teachers in private elementary and secondary schools, classroom teachers in public elementary and secondary schools by organizational level and full-time senior instructional staff in higher education were estimated according to the methods described in the following chapters.

CHAPTER 2

Enrollment

The enrollment projections in the appendix were based on projected enrollment rates by age and sex which were applied to population projections by age and sex developed by the Bureau of the Census. The enrollment rates were calculated by dividing a given enrollment by age, by the population for the same age. In projecting these rates, the most recent trends were taken into account. The enrollment rates were then used in the interactive forecasting model (IFMOD).

The current model has five stages (see figure 1). In the first stage, enrollment rates at all levels of education are projected and applied to age-specific population projections.[1] This stage, which is used separately for each sex, includes: nursery and kindergarten; elementary grades 1–8; secondary grades 9–12; full-time college enrollment; and part-time college enrollment. For each of these levels, enrollment rates were projected for each year of age from 3 through 24 years, and for the age groups 25 to 29, 30 to 34, and 35 years and over.

Enrollments by age and age-group from the Bureau of the Census[2] were adjusted to NCES totals in order to compute enrollment rates for 1967 through 1982. Different assumptions were made in order to produce low, intermediate, and high alternative projections of the past enrollment rates through 1992. These assumptions are described in detail in table 13.

Nursery and Kindergarten

Nursery and kindergarten enrollments were only considered for 3- to 6-year-olds. Table 1 shows the 1972, 1977, and 1982 enrollment rates and high, intermediate, and low alternative enrollment rates for 1987 and 1992. The low alternative enrollment projections were based on constant enrollment rates and therefore, remained the same throughout the projected period.

Elementary Grades 1–8

Projections of elementary enrollment rates were considered only for ages 5 through 18. Elementary enrollments are negligible for the remaining ages. Since most elementary enrollment rates have been fluctuating at levels close to 100 percent throughout the 1967 to 1982 period, alternative enrollment rate projections were not computed. The only set of enrollment rate projections computed was based on the assumption that rates will remain constant through 1992 (table 2). Several of the rates shown in table 2 exceed 100 percent. This is probably due to several factors. For example, the Census enrollment data by age were prorated to agree with NCES totals. Additionally the Bureau of the Census does not revise enrollment estimates by age, but population estimates are revised regularly.

Secondary Grades 9–12

Projections of secondary enrollment rates were considered only for ages 12 through 34, since enrollments for the remaining ages are negligible. Because secondary enrollment rates have fluctuated around constant levels throughout the 1967 to 1982 period, alternative enrollment rate projections were not calculated. The only set of projections computed was based on constant enrollment rates (table 3).

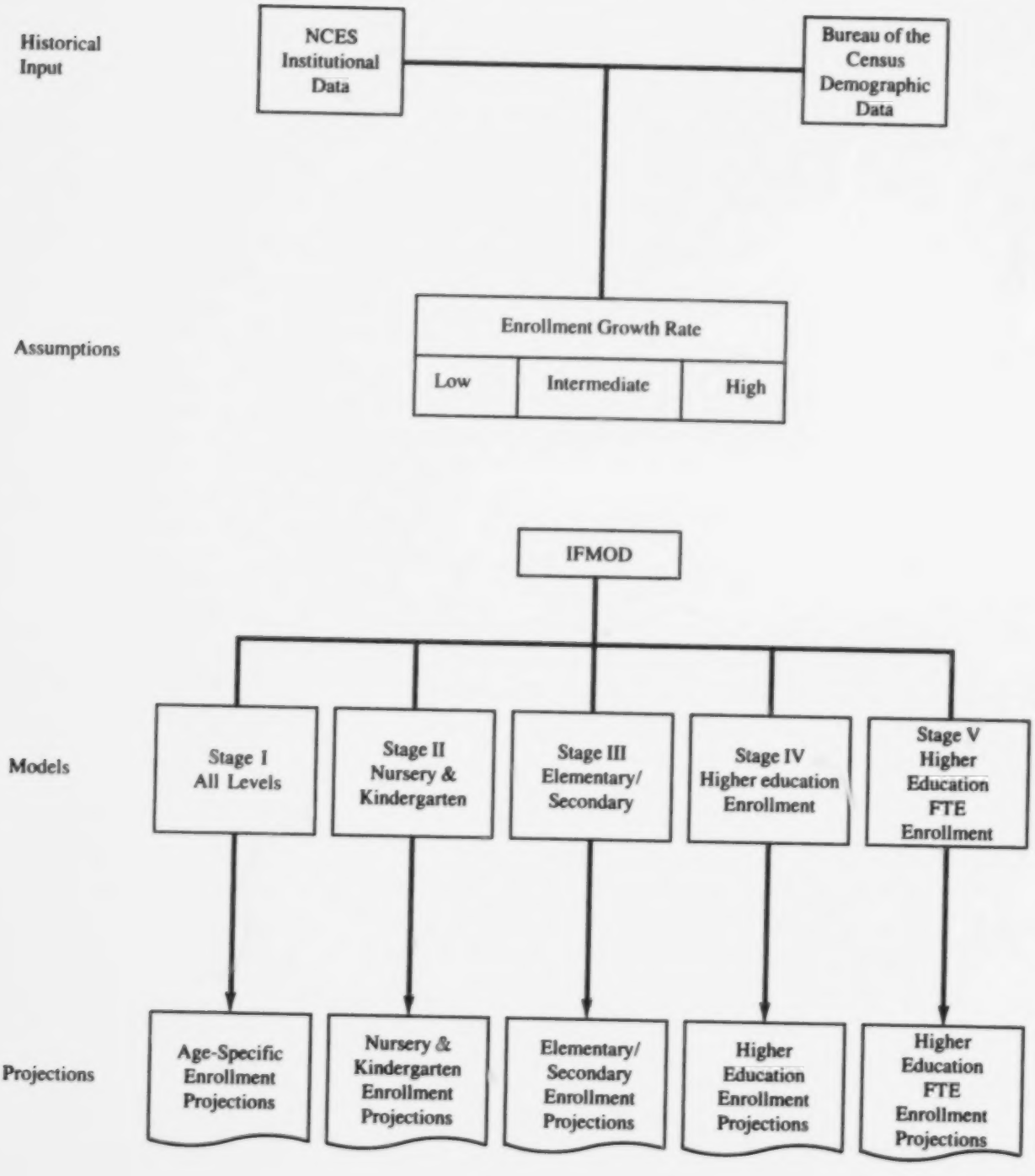
College Full-Time and Part-Time Enrollment

Projections of full-time and part-time college enrollments were considered only for ages 16 and over since college enrollment is negligible for younger ages. Three alternative projections were made using various assumptions. Table 4 shows enrollment rates for 1972, 1977, and 1982, and low, intermediate, and high alternative projected enrollment rates for 1987 and 1992.

[1]Department of Commerce, Bureau of the Census, *Current Population Reports*, "Population Estimates and Projections: Projections of Population of the United States: 1982 to 2050," Series P-25.

[2]U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, "Population Characteristics, School Enrollment-Social and Economic Characteristics of Students," 1967 through 1982, Series P-20.

Figure 1.— General Structure and Methodology of the Interactive Forecasting Model (IFMOD)



Nursery and Kindergarten Enrollment, by Age, Sex and Group

The second stage of IFMOD projects enrollments in nursery schools and kindergarten by age and sex of student, and by control of school. Enrollment rates by age, sex, and control were projected independently and then adjusted to agree with low, intermediate, and high nursery and kindergarten enrollment rate projections from the first stage of IFMOD. Table 5 shows actual rates for 1972, 1977, and 1982, and the projected enrollment rates by age, sex, and control used to develop the nursery and kindergarten enrollment projections.

Enrollment in Elementary and Secondary Schools, by Grade Group, Organizational Level, and Control

The third stage of IFMOD projects public and private enrollment in elementary and secondary schools, by grade group and by organizational level. Public enrollments by age were based on enrollment rate projections for nursery and kindergarten; grade 1; elementary ungraded and special; secondary ungraded and special; and post-graduate enrollment. Grade retention rate projections were used for grades 2 through 12. Table 6 shows the public enrollment rates and table 7 shows the public grade-retention rates for 1972, 1977, 1982, and projections for 1987 and 1992. The projected rates in tables 6 and 7 were used to compute the projections of enrollments in elementary and secondary schools by grade shown in table B-2.

The public grade retention rates for the 6th and 7th grade and from the 8th to 9th are over 100 percent because large numbers of private elementary students change to public secondary schools at these levels. Projections of public enrollment by organizational level were based on projections of the percent of 7th- and 8th-grade students in secondary schools.

College Enrollment, by Sex, Attendance Status and Level Enrolled by Student, and by Type and Control of Institution

The fourth stage of IFMOD projects enrollments in institutions of higher education by sex, attendance status, and level enrolled by student, and by type and control of institution. For each age group, by attendance status and sex, the percentage that enrollment by level enrolled and type of institution was of total enrollment was projected. These projections are shown in tables 8 and 9, along with actual values for 1982. For all projections, it was assumed that there was no enrollment in 2-year institutions at the post-baccalaureate level (graduate and first-professional).

The projected rates shown in tables 8 and 9 were then adjusted to agree with the projected age-specific enrollment rates in the first stage of IFMOD. The adjusted rates were then applied to the projected enrollments by age-group, sex, and attendance status, from the first stage to obtain projections by age-group, sex, attendance status, level enrolled, and type of institution.

For each enrollment category—sex, attendance status, level enrolled and type of institution—public enrollment as a percentage of total enrollment was projected. These projections are shown in table 10 along with actual percentages for 1982. The projected rates shown were then applied to the projected enrollments in each enrollment category to obtain projections by control of institution.

For each enrollment category, by sex and enrollment level, and by type and control of institution, graduate enrollment as a percentage of postbaccalaureate enrollment was projected. Actual graduate rates for 1982 and projections for 1987 and 1992 are shown in table 11. The projected rates in table 11 were then applied to projections of postbaccalaureate enrollment to obtain graduate and first-professional enrollment projections by sex and attendance status and by type and control of institution.

Full-Time-Equivalent Enrollment, by Type and Control of Institution and by Level Enrolled

The fifth stage of IFMOD projects full-time-equivalent enrollment by type and control of institution and by level enrolled. For each enrollment category, by level enrolled, and by type and control of institution, the full-time-equivalent of part-time enrollment was projected as a percentage of part-time enrollment. Actual percentages for 1982 and projections for 1987 and 1992 are shown in table 12.

These projected percentages were applied to projections of enrollments, by level enrolled, and by type and control of institution from the fourth stage. The resultant projections of the full-time-equivalent of part-time enrollment were added to projections of full-time enrollment (from the previous stage) to obtain projections of full-time-equivalent enrollment.

Basic Methodology

The notation and equations that follow describe the basic models that were used to project nursery and kindergarten enrollment, elementary and secondary enrollment and higher education enrollment.

Nursery and Kindergarten

For nursery schools and kindergartens, projections were computed separately by sex of student and control of school.

The notation and equation are:

Let:

i = Subscript denoting age

t = Subscript denoting year

E_{it} = Enrollment of students age i

P_{it} = Population age i

R_{it} = Enrollment rate for students age i

T_{it} = Total enrollment for particular subset of students: males and females, by control of school

Then:

$$T_{it} = \sum_{i=3}^{6} E_{it}; \text{ where } E_{it} = R_{it}(P_{it})$$

Elementary and Secondary Enrollment

For elementary and secondary schools, projections were computed separately by control of school. The notation and equations are:

Let:

K_t = Enrollment at the nursery and kindergarten level

G_{jt} = Enrollment in grade j

E_t = Enrollment in elementary special and ungraded programs

S_t = Enrollment in secondary special and ungraded programs

PG_t = Enrollment in post-graduate programs

P_i = Population age i

RK_t = Enrollment rate for nursery and kindergarten

$RG1_t$ = Enrollment rate for grade 1

RE_t = Enrollment rate for elementary special and ungraded programs

RS_t = Enrollment rate for secondary special and ungraded programs

RPG_t = Enrollment rate for post-graduate programs

EG_t = Total enrollment in elementary grades (K–8)

SG_t = Total enrollment in secondary grades (9–12)

R_{jt} = Retention rate for grade j: the proportion that enrollment in grade j in year t is of enrollment in grade j-1 in year t-1.

Then:

$$EG_t = K_t + E_t + \sum_{j=1}^{8} G_{jt}$$

$$SG_t = S_t + PG_t + \sum_{j=9}^{12} G_{jt}$$

Where:

$K_t = RK_t(P_5)$

$G_{jt} = R_{jt}(G_{j-1,t-1})$

$$E_t = RE_t\left(\sum_{i=5}^{13} P_i\right)$$

$G_{1t} = RG1_t(P_6)$

$$S_t = RS_t\left(\sum_{i=14}^{17} P_i\right)$$

$PG_t = RPG_t(P_{18})$

Higher Education Enrollment

For institutions of higher education, projections were computed separately by sex and attendance status of student. The notation and equations are:

Let:

i = Subscript denoting age except:

- i = 25; ages 25–29
- i = 26; ages 30–34
- i = 27; ages 35 and over for enrollment (35–44 for population)

t = Subscript denoting year

E_{it} = Enrollment of students age i

P_{it} = Population age i

R_{it} = Enrollment rate for students age i

T_{it} = Total enrollment for particular subset of students; full-time men, full-time women, part-time men, part-time women

Then:

$$T_{it} = \sum_{i=16}^{27} E_{it}$$

Where:

$E_{it} = R_{it}(P_{it})$

Methodological Tables

The tables in this section describe the rates used to calculate projections of enrollments (tables 1–12), basic assumptions underlying enrollment projections (table 13) and methods used to estimate values for which data are not available (table 14).

Table 1.—Nursery and kindergarten enrollment rates, with alternative projections, by age and sex: Selected years, 1972 to 1992

Age	1972	1977	1982	Low alternative		Intermediate alternative		High alternative	
				1987	1992	1987	1992	1987	1992
Boys									
3 years old	16.1	22.5	27.6	27.1	27.1	33.0	38.0	35.0	40.0
4 years old	33.0	41.2	46.4	45.1	45.1	50.0	55.0	52.0	57.0
5 years old	74.3	80.7	81.4	82.0	82.0	82.0	82.0	82.0	82.0
6 years old	6.5	6.8	11.9	10.7	10.7	11.0	11.0	11.0	11.0
Girls									
3 years old	15.6	21.0	27.8	26.0	26.0	32.0	37.0	34.0	39.0
4 years old	33.5	42.4	46.3	45.1	45.1	50.0	55.0	52.0	57.0
5 years old	75.2	81.3	84.1	82.6	82.6	83.0	83.0	83.0	83.0
6 years old	3.9	6.0	10.2	7.9	7.9	8.0	8.0	8.0	8.0

Table 2.—Elementary enrollment rates, with projections, by age and sex: Selected years, 1972 to 1992

Age	1972	1977	1982	Projected
				1983–1992
Boys				
5 years old	8.8	8.3	8.3	7.8
6 years old	92.4	91.8	88.7	88.7
7 years old	98.3	102.0	99.0	99.2
8 years old	100.6	102.3	99.9	99.1
9 years old	100.3	101.9	98.6	98.6
10 years old	96.0	96.6	98.6	98.3
11 years old	99.1	104.9	96.1	98.4
12 years old	101.1	98.4	98.2	98.8
13 years old	94.8	92.8	93.7	92.5
14 years old	26.2	23.0	25.0	24.9
15 years old	6.4	4.7	5.4	5.4
16 years old	1.3	1.1	1.7	1.3
17 years old	0.1	0.2	0.2	0.2
18 years old	0.2	0.1	-	-
Girls				
5 years old	9.8	11.5	7.0	8.3
6 years old	94.2	93.9	90.5	91.8
7 years old	99.1	102.1	98.9	99.3
8 years old	101.2	102.0	100.3	99.6
9 years old	100.5	101.9	99.0	99.2
10 years old	99.4	96.7	99.0	98.6
11 years old	97.3	105.3	96.4	98.9
12 years old	101.2	100.4	99.8	99.5
13 years old	91.6	90.3	92.1	90.8

Table 2.—Elementary enrollment rates, with projections, by age and sex: Selected years, 1972 to 1992, —Continued

Age	1972	1977	1982	Projected
				1983–1992
14 years old	16.5	15.1	19.1	18.0
15 years old	3.0	2.3	3.2	3.0
16 years old	0.5	0.2	0.2	0.3
17 years old	0.2	0.2	0.1	0.2
18 years old	0.2	-	-	-

Table 3.—Secondary enrollment rates, with projections, by age and sex: Selected years, 1972 to 1992

Age	1972	1977	1982	Projected
				1983–1992
Boys				
12 years old	-	0.4	0.6	0.5
13 years old	7.9	7.4	5.6	6.6
14 years old	67.8	76.4	71.4	71.1
15 years old	91.1	90.7	89.9	90.0
16 years old	93.0	91.2	87.0	90.0
17 years old	78.2	78.2	79.4	77.7
18 years old	19.8	21.2	20.7	20.7
19 years old	4.5	2.9	4.8	4.1
20 years old	1.7	1.4	1.4	1.4
21 years old	0.4	1.0	0.6	0.6
22 years old	0.8	0.4	0.6	0.4
23 years old	0.7	0.3	0.4	0.4
24 years old	0.5	0.6	0.3	0.3
25–29 years old	0.1	0.3	0.3	0.2
30–34 years old	0.1	0.1	0.1	0.2
Girls				
12 years old	0.2	0.2	0.5	0.6
13 years old	10.6	9.7	7.6	8.9
14 years old	78.4	81.8	81.6	79.4
15 years old	93.8	95.0	88.0	91.3
16 years old	95.9	93.2	91.3	91.8
17 years old	72.7	72.7	75.1	74.6
18 years old	12.0	12.6	14.1	13.7
19 years old	2.4	3.0	2.4	2.6
20 years old	1.0	1.7	1.3	1.3
21 years old	0.4	0.7	0.7	0.7
22 years old	0.3	0.6	0.4	0.5
23 years old	0.2	0.4	0.3	0.5
24 years old	0.1	0.3	0.8	0.6
25–29 years old	0.3	0.4	0.4	0.4
30–34 years old	0.3	0.4	0.2	0.2

Table 4.—College enrollment rates, with alternative projections, by age, sex and attendance status: Selected years, 1972 to 1992

Age	1972	1977	1982	Low alternative		Intermediate alternative		High alternative	
				1987	1992	1987	1992	1987	1992
Men									
Full time									
16 years old	0.4	0.1	0.2	0.3	0.3	0.3	0.3	0.4	0.4
17 years old	5.9	4.0	4.2	3.6	3.3	3.9	3.9	4.0	3.9
18 years old	31.0	27.2	26.6	26.6	26.1	27.2	27.2	27.2	27.2
19 years old	30.0	27.4	27.3	25.8	24.3	27.8	27.8	28.2	27.8
20 years old	28.1	23.6	26.6	25.3	25.3	25.3	25.3	25.3	25.3
21 years old	23.8	24.9	22.0	20.4	18.9	22.1	22.1	22.1	22.1
22 years old	15.0	12.7	13.6	14.0	13.8	14.2	14.2	14.4	14.3
23 years old	13.1	11.2	10.8	10.3	9.9	10.9	10.9	11.3	11.3
24 years old	11.1	10.1	7.8	7.4	6.5	8.4	8.4	9.2	9.1
25–29 years old	5.0	5.2	4.3	4.1	4.0	4.2	4.2	4.8	4.9
30–34 years old	1.7	1.9	1.9	1.8	1.8	1.8	1.8	1.9	2.1
35–44 years old	0.5	0.7	0.6	0.6	0.6	0.6	0.6	0.8	0.8
Part-time									
16 years old	-	-	-	-	-	-	-	-	-
17 years old	0.2	0.7	0.7	0.6	0.6	0.6	0.6	0.7	0.8
18 years old	2.3	3.2	3.0	3.2	3.2	3.3	3.3	3.9	4.4
19 years old	2.2	3.2	3.2	3.1	2.9	3.4	3.4	4.2	4.7
20 years old	3.8	4.0	5.1	4.6	4.6	4.6	4.6	5.0	5.4
21 years old	3.2	4.2	4.2	4.0	4.0	4.0	4.0	4.2	4.4
22 years old	6.9	6.8	8.0	7.6	7.6	7.6	7.6	7.9	8.2
23 years old	6.1	6.0	6.4	5.8	5.8	5.8	5.8	5.9	6.0
24 years old	5.2	5.4	4.6	4.2	3.9	4.5	4.5	4.5	4.5
25–29 years old	7.0	6.8	5.9	5.9	5.5	6.2	6.2	6.2	6.2
30–34 years old	4.2	5.1	4.1	3.7	3.0	4.6	4.6	4.8	4.9
35–44 years old	3.2	4.1	3.7	3.5	3.3	3.6	3.6	4.1	4.5
Women									
Full-time									
16 years old	0.7	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.6
17 years old	6.0	5.4	5.3	4.0	2.9	5.6	5.6	5.6	5.6
18 years old	32.5	31.6	29.9	29.7	28.4	31.2	31.2	31.6	31.8
19 years old	26.8	25.8	29.4	29.3	29.3	30.0	30.0	31.7	33.3
20 years old	21.8	23.1	25.7	23.9	23.9	24.3	24.3	25.9	27.3
21 years old	20.1	19.8	21.0	20.3	20.3	20.6	20.6	22.4	23.9
22 years old	5.1	8.2	10.1	8.9	8.9	9.2	9.2	11.1	12.7
23 years old	4.1	6.5	7.2	6.8	6.8	7.0	7.0	8.9	9.8
24 years old	3.2	5.7	6.2	5.9	5.9	6.1	6.1	7.6	8.7
25–29 years old	1.4	2.9	3.1	2.7	2.7	2.8	2.8	3.6	4.2
30–34 years old	0.9	1.4	1.3	1.3	1.2	1.4	1.4	1.8	2.0
35–44 years old	0.6	1.2	1.1	1.0	1.0	1.1	1.1	1.4	1.6

Table 4.—College enrollment rates, with alternative projections, by age, sex and attendance status: Selected years, 1972 to 1992 Continued

Age	1972	1977	1982	Low alternative		Intermediate alternative		High alternative	
				1987	1992	1987	1992	1987	1992
Women									
Part-time									
16 years old	-	-	-	-	-	-	-	-	-
17 years old	0.5	0.7	0.3	0.5	0.5	0.5	0.5	0.5	0.5
18 years old	2.9	4.7	5.1	4.3	4.3	4.5	4.5	5.0	5.4
19 years old	2.4	3.8	5.0	4.1	4.1	4.2	4.2	4.9	5.5
20 years old	4.0	4.3	6.3	5.6	5.6	5.7	5.7	6.4	7.0
21 years old	3.6	3.7	5.2	4.7	4.7	4.9	4.9	5.6	6.1
22 years old	6.7	7.3	8.6	7.9	7.9	8.0	8.0	8.9	9.5
23 years old	5.3	5.8	6.1	6.0	6.0	6.1	6.1	6.8	7.4
24 years old	4.2	5.1	5.2	5.3	5.3	5.3	5.3	6.1	6.7
25–29 years old	4.3	6.0	6.0	5.9	5.9	6.0	6.0	7.2	8.2
30–34 years old	2.8	5.1	6.1	5.7	5.7	5.9	5.9	7.6	9.0
35–44 years old	3.6	5.8	5.8	6.0	6.0	6.2	6.2	7.8	9.0

-Less than 0.1 percent.

Table 5.—Enrollment rates in nursery schools and kindergartens, with projections, by age and sex of student, and by control of institution: Selected years, 1972 to 1992

Age	1972	1977	1982	Projected	
				1987	1992
			Public institutions		
Boys					
3 years old	4.5	6.8	10.1	8.8	8.8
4 years old	15.6	18.9	18.7	18.7	18.7
5 years old	63.2	68.4	68.2	69.2	67.2
6 years old	5.8	5.9	9.8	9.5	9.5
Girls					
3 years old	4.4	6.5	10.2	8.5	8.5
4 years old	15.9	19.5	18.6	18.7	18.7
5 years old	63.9	68.9	70.6	70.0	70.0
6 years old	3.5	4.9	8.4	6.8	6.8
			Private institutions		
Boys					
3 years old	11.6	15.6	17.4	18.2	18.2
4 years old	17.3	22.4	27.8	26.3	26.3
5 years old	11.1	12.2	13.2	12.8	12.8
6 years old	0.7	1.0	2.0	1.5	1.5

Table 5.—Enrollment rates in nursery schools and kindergartens, with projections, by age and sex of student, and by control of institution: Selected years, 1972 to 1992, Continued

Age	1972	1977	1982	Projected	
				1987	1992
Girls					
3 years old	11.3	14.6	17.6	17.5	17.5
4 years old	17.5	23.0	27.7	26.3	26.3
5 years old	11.4	12.3	13.6	13.0	13.0
6 years old	0.5	0.9	1.8	1.2	1.2

Table 6.—Enrollment rates in public schools, with projections, by grade level: Selected years, 1972 to 1992

Grade level*	1972	1977	1982	Projected	
				1987	1992
Regular nursery and kindergarten	72.2	85.4	84.7	85.3	85.3
Grade 1	94.0	93.2	91.6	92.6	92.6
Elementary ungraded and special	2.6	2.3	2.4	2.4	2.4
Secondary ungraded and special	2.1	1.8	2.6	2.6	2.6
Post-graduate	0.3	0.3	0.4	0.4	0.4

*Where rates for *regular nursery* and kindergarten are based on the number of 5-year-olds; grade 1, 6-year-olds; elementary ungraded and special, 5- to 13-year-olds; secondary ungraded and special, 14- to 17-year olds; and postgraduate, 18-year-olds.

Table 6.1.—Enrollment rates used to determine alternative projections of enrollment in elementary and secondary schools, by grade level: 1972, 1977, and 1992

Year	Grade level*	
	Elementary (K–8)	Secondary (9–12)
1972	99.6	91.4
1977	100.8	91.4
1982	101.4	92.9
	Projected	
1987	101.4	92.9
1992	101.4	92.9

*Where rates for elementary (K–8) are based on the number of 5- to 13-year olds and rates for secondary (9–12) are based on the number of 14- to 17-year olds.

Table 7.—Public grade retention rates, with projections: Selected years, 1972 to 1992

Grade	1972	1977	1982	Projected	
				1987	1992
2nd	94.7	97.2	94.5	95.1	95.1
3rd	98.5	100.4	99.1	99.4	99.4
4th	98.4	101.1	99.3	99.7	99.7
5th	99.3	101.3	98.9	99.6	99.6
6th	99.4	101.4	99.2	100.0	100.0
7th	102.5	104.1	102.3	103.2	103.2
8th	98.4	100.0	97.8	98.4	98.4
9th	104.0	105.9	106.0	105.9	105.9
10th	96.5	96.7	95.1	95.4	95.4
11th	91.0	90.8	89.9	90.0	90.0
12th	89.7	89.9	90.1	90.2	90.2

Table 8.—Full-time enrollment, by level enrolled and type of institution, as a percent of total enrollment, for each age and sex classification, with projections: 1982, 1987 and 1992

Enrollment category	Men			Women		
	Actual	Projected*		Actual	Projected*	
	1982	1987	1992	1982	1987	1992
			Undergraduate, 4-year institutions			
16-17 years old	58.4	62.1	62.1	66.8	64.9	64.9
18-19 years old	66.5	66.3	66.3	66.8	66.5	66.5
20-21 years old	79.0	80.6	80.6	84.6	84.6	84.6
22-24 years old	60.5	59.0	59.0	59.5	58.9	58.9
25-29 years old	35.8	37.4	37.4	34.7	36.7	36.7
30-34 years old	33.7	32.9	32.9	32.6	40.1	40.1
35 years old and over	34.1	32.6	32.6	32.8	39.9	39.9
			Undergraduate, 2-year institutions			
16-17 years old	41.6	37.9	37.9	33.1	35.0	35.0
18-19 years old	33.5	33.7	33.7	33.2	33.5	33.5
20-21 years old	21.0	19.4	19.4	15.4	15.4	15.4
22-24 years old	15.7	15.2	15.2	22.5	19.4	19.4
25-29 years old	22.4	20.1	20.1	29.3	27.1	27.1
30-34 years old	21.4	22.3	22.4	35.4	30.0	30.0
35 years old and over	20.7	22.6	22.6	35.4	30.1	30.1
			Post baccalaureate, 4-year institutions			
16-17 years old	---	---	---	---	---	---
18-19 years old	---	---	---	---	---	---
20-21 years old	---	---	---	---	---	---
22-24 years old	23.8	25.8	25.8	18.0	18.0	18.0
25-29 years old	41.8	42.6	42.6	36.1	35.9	35.9
30-34 years old	44.9	44.7	44.7	31.9	30.0	30.0
35 years old and over	45.2	44.8	44.8	31.8	30.0	30.0

(---) Not applicable.
*Projections shown for 1987 and 1992 were adjusted to add to 100 percent before computing full-time enrollment projections.

Table 9.—Part-time enrollment, by level enrolled and type of institution, as a percent of total enrollment, for each age and sex classification, with projections:[1] 1982, 1987 and 1992

Enrollment category	Men			Women		
	Actual	Projected[1]		Actual	Projected[1]	
	1982	1987	1992	1982	1987	1992
Undergraduate, 4-year institutions						
16-17 years old	30.0	26.6	26.6	46.6	29.7	29.7
18-19 years old	21.3	19.2	19.2	15.7	16.9	16.9
20-21 years old	30.6	28.2	28.2	25.8	29.1	29.1
22-24 years old	31.2	31.2	31.2	32.5	29.8	29.8
25-29 years old	31.0	29.9	29.9	27.0	27.2	27.2
30-34 years old	23.8	26.8	26.8	26.8	26.5	26.5
35 years old and over	23.8	26.7	26.7	26.8	26.6	26.6
Undergraduate, 2-year institutions						
16-17 years old	63.7	68.2	68.2	53.4	67.9	67.9
18-19 years old	72.4	74.8	74.8	80.2	78.8	78.8
20-21 years old	62.7	65.4	65.4	69.9	65.5	65.5
22-24 years old	54.8	53.6	53.6	56.2	56.0	56.0
25-29 years old	48.8	48.6	48.6	54.5	51.9	51.9
30-34 years old	51.1	47.8	47.8	51.7	53.1	53.1
35 years old and over	51.1	47.8	47.8	51.8	53.0	53.0
Post-baccalaureate, 4-year institutions						
16-17 years old	6.3	0[2]	0[2]	0	0[2]	0[2]
18-19 years old	6.3	6.0	6.0	4.0	3.1	3.0
20-21 years old	6.6	6.4	6.4	4.4	4.4	4.4
22-24 years old	14.0	11.5	10.0	11.3	9.9	9.6
25-29 years old	20.2	17.7	16.2	18.5	15.4	14.4
30-34 years old	25.1	23.5	22.8	21.4	18.2	17.3
35 years old and over	25.1	25.1	25.1	21.4	20.4	20.4

[1]Projections shown for 1987 and 1992 were adjusted to add to 100 percent before computing part-time enrollment projections.
[2]Projections for 1987 and 1992 are shown as 0 because of erratic behavior of the time series for 16-to 17-years-olds: percents periodically returned to near 0 or 0 values.

Table 10.—Public enrollment as a percentage of total enrollment, by attendance status, sex and level enrolled, and by type of institution, with projections: 1982, 1987 and 1992

Enrollment category	Men			Women		
	Actual	Projected		Actual	Projected	
	1982	1987	1992	1982	1987	1992
Full-time, undergraduate, 4-year institutions	69.1	68.9	68.9	68.7	68.7	68.7
Part-time, undergraduate, 4-year institutions	72.5	72.0	72.0	68.9	69.4	69.4
Full-time, undergraduate, 2-year institutions	91.4	92.3	92.3	89.1	89.7	89.7
Part-time, undergraduate, 2-year institutions	96.4	97.4	97.4	98.4	98.3	98.3
Full-time, postbaccalaureate, 4-year institutions	55.7	56.0	56.0	60.4	61.2	61.2
Part-time, postbaccalaureate, 4-year institutions	59.0	60.0	60.0	69.7	70.9	70.9

Table 11.—Graduate enrollment as a percent of total postbaccalaureate enrollment, by sex, attendance status, and by type and control of institution, with projections: 1982, 1987, and 1992

Enrollment category	Men			Women		
	Actual	Projected		Actual	Projected	
	1982	1987	1992	1982	1987	1992
Full-time, 4-year institutions public	71.2	70.7	70.7	79.5	81.0	81.0
Part-time, 4-year institutions public	98.8	98.7	98.7	99.4	99.4	99.4
Full-time, 4-year institutions private	49.8	49.5	49.5	61.6	63.3	63.3
Part-time, 4-year institutions private	91.6	91.2	91.2	94.9	95.0	95.0

Table 12.—Full-time-equivalent of part-time enrollment as a percent of part-time enrollment, by level enrolled, and by type and control of institution, with projections: 1982, 1987 and 1992

Enrollment category	1982	Projected	
		1987	1992
Public, 4-year, undergraduate	39.9	39.5	39.5
Public, 2-year, undergraduate	33.9	33.6	33.6
Private, 4-year, undergraduate	36.8	37.0	37.0
Private, 2-year, undergraduate	45.2	41.0	41.0
Public, 4-year, graduate	35.8	35.9	35.9
Public, 2-year, graduate	---	---	---
Private, 4-year, graduate	37.7	37.5	37.5
Private, 2-year, graduate	---	---	---
Public, 4-year, first-professional	40.0	41.9	41.9
Public, 2-year, first-professional	---	---	---
Private, 4-year, first-professional	57.1	51.4	51.4
Private, 2-year, first-professional	---	---	---

(—) Not applicable.

Table 13.—Enrollment (assumptions)

Variables	Assumptions	Alternatives	Table
Nursery and kindergarten enrollment	Age-specific enrollment rates will remain constant with the most recent rates.	low	B-1
	Age-specific enrollment rates will increase at a rate proportional to the high alternative.	intermediate	B-1
	Age-specific enrollment rates will continue their past trends through 1992.	high	B-1
Elementary and secondary enrollment	Age-specific enrollment rates will remain constant at levels consistent with the most recent rates.	intermediate	B-2,B-3
	Public enrollment rates and public grade retention rates will remain constant at levels consistent with the most recent rates.	intermediate	B-2,B-3
	The percent of 7th and 8th grade public students enrolled in schools organized as secondary schools will remain constant at levels consistent with the most recent rates.	intermediate	B-3
	Private enrollment by organizational level equals private enrollment by grade group.	intermediate	B-3
	Total elementary and secondary enrollment assumes that the lowest alternative series population projections will occur.	lowest	B-2.1
	Total elementary and secondary enrollment assumes that the highest alternative series population projections will occur.	highest	B-2.1
College full-time and part-time enrollment, by age			
Men	Age-specific enrollment rates will remain constant at levels consistent with most recent rates, with the exception of rates that decrease.	low	B-4 through B-13
	Age-specific enrollment rates will remain constant at levels consistent with the most recent rates.	intermediate	B-4 through B-13
	Age-specific enrollment rates will either equal the intermediate alternative or increase, based on past trends.	high	B-4 through B-13
Women	Age-specific enrollment rates will remain constant at levels consistent with most recent rates, with the exception of rates that decrease.	low	B-4 through B-13
	Age-specific enrollment rates will remain constant at levels consistent with the most recent rates.	intermediate	B-4 through B-13
	Age-specific enrollment rates will either equal the intermediate alternative or increase, based on past trends.	high	B-4 through B-13

Table 13.—Enrollment (assumptions), Continued

Variables	Assumptions	Alternatives	Table
College enrollment, by sex, attendance status and level enrolled by student, and by type of institution	For each group and for each attendance status separately, enrollment by sex and level enrolled by student, and by type of institution as a percent of total enrollment, will follow past trends through 1992. For each age group and attendance status category, the restriction that the sum of the percents must equal 100 was applied.	high, intermediate, and low	B-5 through B-13
College enrollment, by control of institution	For each enrollment category, by sex attendance status, and level enrolled by student, and by type of institution, public enrollment as a percent of total enrollment will remain constant at levels consistent with most recent rates.	high, intermediate, and low	B-5 through B-13
Graduate enrollment	For each enrollment category, by sex and by type and control of institution, graduate enrollment as a percent of postbaccalaureate enrollment will follow past trends through 1992.	high, intermediate, and low	B-10 through B-13
Full-time-equivalent of part-time enrollment	For each enrollment category, by type and control of institution and level enrolled by student, the percent that full-time equivalent of part-time enrollment is of part-time enrollment will remain constant at levels consistent with the most recent rates.	high, intermediate, and low	B-13

The basic data used to project the time series listed in the following table were wholly or partially estimated for the years indicated.

Table 14.—Enrollment (estimation methods)

Time series	Years	Estimation method	Tables
Enrollment in regular elementary and secondary schools	1971-75, 1979, 1981-82	For elementary and secondary schools separately, the percentage that enrollment in Catholic schools was of enrollment in all private schools was interpolated. The interpolated percentages were applied to Catholic enrollment figures in each year.	B-2,B-3
Enrollment in institutions of higher education, by age and attendance status	1972, 1977, 1982	For each sex, enrollment data from the Bureau of the Census by individual ages and by attendance status for 2-year age groups were combined by assuming that within the 2-year age groups, age and attendance status were distributed independently. The resultant enrollment estimates by age and attendance status were then adjusted to NCES enrollment counts by attendance status.	B-4A, B-4B, B-4C

CHAPTER 3

High School Graduates and Earned Degrees

High School Graduates

Projections of high school graduates by sex were developed by expressing high school graduates as a percent of the 18-year-old population (table 15). The percent was assumed to remain constant at levels consistent with the most recent rates throughout the projected period. This constant rate was then applied to projections of the 18-year-old population to obtain projections of high school graduates.

Projections of public high school graduates were developed by using graduation rates (table 16) based on projections of enrollment in grade 12 from IFMOD. Public graduation rates were calculated by dividing the number of public high school graduates by the enrollment in grade 12. These graduation rates were then projected and applied to projected enrollment in grade 12 to obtain projections of public high school graduates. Projections of private high school graduates were developed by expressing private high school graduates as a percent of the 18-year-old population. The total for public and private high school graduates was adjusted to agree to the total number of high school graduates, by sex.

General Educational Development Degrees

Projections of General Educational Development degrees (GED's) were developed by expressing the number of GED's as a percent of the population, by age group (table 17). These percents were assumed to increase gradually for persons 17 to 29 years old and remain constant for persons 30 years and over.

Degrees

Projections of bachelor's and master's degrees by sex were based on demographic models which relate degree awards to college enrollments by year enrolled and attendance status. Since this type of model produced inadequate results and unrealistic projections for doctor's degrees, a trend model was used to project doctor's degrees by sex.

Bachelor's Degrees

Bachelor's degree projections by sex were based jointly on undergraduate enrollment and 4th-year enrollment by attendance status.* For men, a dummy variable was also used representing the change in the direction of the trend in the number of degrees. The percentage that 4th-year college enrollment was of undergraduate enrollment in 4-year institutions was projected using exponential smoothing as the principal forecasting technique (table 18). Projections of 4th-year enrollment were developed by applying these projected percentages to projections of undergraduate enrollment by attendance status.

Results of the regression analysis used to project bachelor's degrees by sex are shown in equations of table 19. Results for degree alternatives are shown in table 22.

Master's Degrees

The projections of master's degrees by sex were based jointly on total graduate enrollment and full-time graduate enrollment. Equations in table 20 show the results of the regression analysis used to project master's degrees by sex. Equations for degree alternatives are shown in table 22.

Doctor's Degrees

The projections of doctor's degrees were based on the extrapolation of past trends. At the national level, regression models using graduate enrollment variables did not yield reasonable projections. Thus, an extrapolative technique seemed a likely alternative since the numbers of doctor's degrees for men had been decreasing and those for women

*Only full-time enrollment was used in the model

increasing over the past decade. Equations in table 21 show the results of the trend analysis used to project doctor's degrees by sex.

First-Professional Degrees

Projections of first-professional degrees were determined by adding the individual field projections. First-professional degrees in the health professions were obtained from the Bureau of Health Manpower, Department of Health and Human Services. First-professional degrees in law, theology, pharmacy, chiropractic, and "other" fields were developed by NCES. The principal forecasting technique used was exponential smoothing.

Methodological Tables

The tables in this chapter describe rates used to calculate projections (tables 15-18), equations used to calculate projections (tables 19-22), and basic assumptions underlying projections (table 23).

Table 15.—High school graduates as a percent of the 18-year-old population, with projections, by sex: Selected years, 1972 to 1992

Year	Boys	Girls
1972	74.0	77.0
1977	71.7	76.6
1982	68.9	74.5
	Projected	
1983-1992	70.9	74.4

Table 16.—High school graduates as percent of grade 12 enrollment in public schools, with projections: Selected years, 1972 to 1992

Year	Graduation rate (percent)
1972	94.3
1977	94.2
1982	92.1
	Projected
1983-1992	93.0

Table 17.—General Educational Development degrees as a percent of population, with projections, by age group: Selected years, 1977 to 1992

Age	1977	1982	Projected	
			1987	1992
17-19	1.0	1.4	1.6	1.7
20-24	0.4	0.6	0.6	0.6
25-29	0.2	0.3	0.3	0.3
30-34	0.2	0.2	0.2	0.2
35 and over	0.1	0.1	0.1	0.1

Table 18.—Full-time 4th-year undergraduate enrollment as a percent of undergraduate enrollment in 4-year institutions, with projections, by sex*: 1982, 1987 and 1992

Year enrolled	Men	Women
1982	20.9	20.5
	Projected	
1987	22.7	23.1
1992	23.6	24.0

*Projections for 1987 and 1992 have been adjusted to agree with numbers in table A-9.

Table 19.—Equations for bachelor's degrees: 1967-68 to 1981-82

(N=15)

Regression equations	R^2[1]	Durbin-Watson Statistic[2]	Regression technique
Men ..... BAM = +7.18+1.03M4F−32.83DMY (6.22) (2.28)	.78	2.19	Ordinary least squares
Women ..... BAW = −50.25+1.14W4F (8.96)	.86	2.07	Ordinary least squares

BAM = The total number of bachelor's degrees awarded to men.

BAW = The total number of bachelor's degrees awarded to women.

M4F = Full-time fourth-year college enrollment for men, lagged one year.

W4F = Full-time fourth-year college enrollment for women, lagged one year.

DMY = Dummy variable representing the change in the direction of trend in the enrollment of men lagged 4 years: 1967-68 to 1973-74 = 0; 1974-75 to 1981-82 = 1.

[1]R^2 = Coefficient of determination.

[2]For an explanation of the Durbin-Watson Statistics, see J. Johnston, *Econometric Methods*, New York: McGraw Hill 1972, pages 251-252.

NOTE: The numbers in parentheses refer to the value of the t-statistics.

Table 20.—Equations for master's degrees: 1970-71 to 1981-82

(N=12)

Regression equations	R^2[1]	Durbin-Watson Statistic[2]	Regression technique
Men ..... MAM = −38.63+0.69M5F (2.79)	.50	.37	Ordinary least squares
Women ..... MAW = 55.98+0.50W5F (5.93)	.80	.38	Ordinary least squares

MAM = The total number of master's degrees awarded to men.

MAW = The total number of master's degrees awarded to women.

M5F = Full-time graduate enrollment for men, lagged two years.

W5F = Full-time graduate enrollment for women, lagged two years.

[1]R^2 = Coefficient of determination.

[2]For an explanation of the Durbin-Watson Statistics, see J. Johnston, *Econometric Methods*, New York: McGraw Hill 1972, pages 251-252.

NOTE: The numbers in parentheses refer to the value of the t-statistics.

Table 21.—Equations for doctor's degrees: 1969-70 to 1981-82

(N=13)

Regression equations	R^2[1]	Durbin-Watson Statistic[2]	Regression technique
Men ..... (1) DOM = +28.94 − 0.05TIME (6.14)	.77	.85	Ordinary least squares
Women ..... (2) DOW = +3.72 + 0.54TIME (34.13)	.99	1.12	Ordinary least squares

DOM = The total number of doctor's degrees awarded to men.

DOW = The total number of doctor's degrees awarded to women.

TIME = Time trends, 1970−1 = 1.0

[1]R^2 = Coefficient of determination.

[2]For an explanation of the Durbin-Watson Statistics, see J. Johnston, *Econometric Methods*, New York: McGraw Hill 1972, pages 251-252.

Table 22.—Equations for alternatives of bachelor's and master's degrees

Dependent variable	Regression equations	R^2	Durbin-Watson Statistic[2]	Regression technique
Bachelor's degrees for women (high alternative)	BAW = 306.24 +12.12TIME (10.93)	.90	.37	Ordinary least squares
Master's degrees for women (high alternative)	MAW = 70.94 +8.58TIME (4.33)	.63	.16	Ordinary least squares

[1]R^2 = Coefficient of determination.

[2]For an explanation of the Durbin-Watson Statistic, see J. Johnston, *Econometric Methods*, New York: McGraw Hill, 1972, pages 251-252.

NOTE: The numbers in parentheses refer to the value of the t-statistics.

21

Table 23.—Graduates and degrees (assumptions)

Variables	Assumptions	Alternatives	Table
High school graduates, by sex	The percent that high school graduates is of the 18-year-old population will remain constant at levels consistent with the most recent rates.	intermediate (no alternatives)	B-14
Public high school graduates	The percent that public high school graduates is of public enrollment in grade 12 will remain constant at levels consistent with the most recent observations.	intermediate (no alternatives)	B-14
Private high school graduates	The percent that private high school graduates is of the 18-year-old population will remain constant at levels consistent with most recent rates.	intermediate (no alternatives)	B-14
General Educational Development degrees, by age	The percent that General Educational Development degrees by age is of population by age will increase, based on past trends, for persons who are 17 to 29 and remain constant for persons 30 years and over.	intermediate (no alternatives)	B-14
Full-time, fourth-year college enrollment (men)	The percent that full-time, fourth-year college enrollment is of full-time undergraduate college enrollment in 4-year institutions will increase, based on past trends.	intermediate	B-14
Full-time, fourth-year college enrollment (women)	The percent that full-time, fourth-year college enrollment is of full-time undergraduate college enrollment in 4-year institutions will increase, based on past trends.	intermediate	B-15
Full-time graduate enrollment, by sex	The percentage that full-time graduate enrollment is of total graduate enrollment will remain constant at levels consistent with most recent rates.	intermediate	B-16
Bachelor's degrees (men)	The number of bachelor's degrees awarded to men is a linear function of full-time, fourth-year enrollment and a dummy variable representing the change in the direction of the trend in the number of degrees.	intermediate	B-15
	The number of bachelor's degrees will equal twice the intermediate alternative, minus the low alternative.	high	B-15
	The number of bachelor's degrees will remain constant at the 1982 level.	low	B-15
Bachelor's degrees (women)	The number of bachelor's degrees awarded to women is a linear function of full-time, fourth-year enrollment. This relationship will continue through 1992-93.	intermediate	B-15
	The number of bachelor's degrees will increase, based on past trends.	high	B-15
	The number of bachelor's degrees will equal twice the intermediate alternative, minus the high alternative.	low	B-15
Master's degrees (men)	The number of master's degrees is a linear function of full-time graduate enrollment. This relationship will continue through 1992-93.	intermediate	B-16
	The number of master's degrees will equal twice the intermediate alternative, minus the low alternative.	high	B-16
	The number of master's degrees will remain constant at the 1982 level.	low	B-16

Table 23.—Graduates and degrees (assumptions), Continued

Variables	Assumptions	Alternatives	Table
Master's degrees (women)	The number of master's degrees is a linear function of full-time graduate enrollment. This relationship will continue through 1992-93.	intermediate	B-16
	The number of master's degrees will increase, based on past trends.	high	B-16
	The number of master's degrees will equal twice the intermediate alternative, minus the high alternative.	low	B-16
Doctor's degrees (men)	The number of doctor's degrees will decrease, based on past trends.	intermediate	B-17
	The number of doctor's degrees will remain constant at the 1982 level.	high	B-17
	The number of doctor's degrees will equal twice the intermediate alternative, minus the high alternative.	low	B-17
Doctor's degrees (women)	The number of doctor's degrees will increase, based on past trends.	intermediate	B-17
	The number of doctor's degrees will remain constant at the 1982 level.	high	B-17
	The number of doctor's degrees will equal twice the intermediate alternative, minus the low alternative.	low	B-17
First-professional degrees, by sex	Projections of degrees in medicine, dentistry, osteopathic, optometry, podiatry, and veterinary medicine were obtained from Bureau of Health Manpower, Department of Health and Human Services.	intermediate	B-18
	The total number of degrees in law, theology, chiropractic and pharmacy (other first-professional degrees) awarded to men will decrease based on past trends while those awarded to women will increase.	intermediate	
	The total number of other first-professional degrees awarded to men will remain constant at the 1982 level.	high	
	The total number of other first professional degrees awarded to men will equal twice the intermediate alternative minus the high alternative.	low	
	The total number of other first-professional degrees awarded to women will remain constant at the 1982 level.	low	
	The total number of other first-professional degrees awarded to women will equal twice the intermediate alternative minus the low alternative.	high	

CHAPTER 4

Instructional Staff

Classroom Teachers

Projections of classroom teachers in regular elementary and secondary schools (table B-19) are based on the enrollment projections by organizational level (table B-3) and on the alternative projections of teacher-pupil ratios (table B-20).

Teacher-pupil ratios are used instead of pupil-teacher ratios because for a given enrollment, the conditional distribution of teacher-pupil ratios is linear, whereas the conditional distribution of pupil-teacher ratios is hyperbolic.

The impact of this can be illustrated for a given 1,000 pupils. For example, 0.6 additional teachers are required to reduce the pupil-teacher ratio from 40 to 39, but 2.6 additional teachers are required to reduce the ratio from 20 to 19. In fact, it requires slightly fewer additional teachers to reduce the pupil-teacher ratio from 40 to 35 than from 17 to 16. In contrast, an equal movement at any two points of the range of teacher-pupil ratios requires an equal number of teachers. Converting to teachers per thousand pupils allows for easier interpretation, it takes one additional teacher to increase this ratio from 39 to 40 and from 19 to 20.

Estimates and projections of the demand for additional teachers in regular public elementary and secondary schools were computed as follows: (1) the number of additional teachers needed for teacher-pupil ratio changes was computed as the total teacher demand in a given year, less the estimated total teacher demand in the same year had the teacher-pupil ratio in the previous year remained constant; (2) the number of additional teachers needed for enrollment changes was computed as the difference between the total teacher demand in a given year and the total teacher demand in the previous year, less the computed number needed for teacher-pupil ratio changes in the given year; and (3) the number of additional teachers needed in a given year to replace those leaving public schools either temporarily or permanently was computed as a percent of the total number of teachers employed in the previous year. Estimates and projections of the demand for additional teachers in regular private elementary and secondary schools are projected in the same manner as for public schools.

Projections of the supply of new teacher graduates were computed as percents of the intermediate alternative bachelor's degree projections in table B-15.

Higher Education Instructional Staff

Projections of full-time-equivalent instructional staff in institutions of higher education are based on alternative projections of full-time-equivalent enrollment, by type and control of institution (table B-13) and constant projections of staff-student ratios (full-time-equivalent instructional staff to 1,000 full-time-equivalent enrollment), by type and control of institution. Full-time-equivalent instructional staff was separated by full-time and part-time status on the basis of the 1979 distribution of these attributes. Part-time instructional staff was estimated on the basis of the ratio of full-time-equivalent of part-time to part-time in 1976.

Basic Methodology

The notation and equations that follow describe the basic models that were used to project classroom teachers and instructional staff. For elementary and secondary schools, projections were computed separately by control and organizational level of school. For institutions of higher education, projections were computed separately by type (4-year and 2-year) and control of institution.

Classroom Teachers

Let:

t = Subscript denoting year
E_t = Enrollment
T_t = Classroom teachers
TP_t = Teachers per thousand pupils (teacher-pupil ratio)
A_t = Total demand for additional teachers

AE_t = Additional teachers needed for enrollment changes
AT_t = Additional teachers needed for teacher-pupil ratio changes
AR_t = Additional teachers needed for replacement (turnover) of teachers
R_t = Replacement (turnover) rate

Then:

$T_t = E_t(TP_t)/1{,}000$

and

$A_t = AE_t + AT_t + AR_t$

Where:

$AT_t = T_t - E_t(TP_{t-1})/1{,}000$
$AE_t = T_t - T_{t-1} - AT_t$
$AR_t = R_t(T_{t-1})$

Higher Education Senior Instructional Staff

Let:

FE_t = Full-time-equivalent enrollment in institutions of higher education
FI_t = Full-time-equivalent senior instructional staff
IE_t = Ratio of full-time-equivalent senior instructional staff to 1,000 full-time-equivalent enrollment (staff-student ratio)

Then:

$FI_t = E_t\ (IE_t)$

Methodological Tables

The tables in this chapter describe equations used to calculate projections (table 24), rates used to calculate projections (table 25-27), basic assumptions underlying projections (table 28), and methods used to estimate values for which data are not available (table 29).

The equations used to project teacher-pupil ratios and the supply of new teacher graduates are shown table 24. The following notation was used in these equations:

TP = Teachers per thousand pupils
NTG = Number of new teacher graduates as a percent of bachelor's degrees
t = Time in years: 1982 = 0

Table 24.—Equations for classroom teachers

Exponential smoothing equations			
Dependent variable	Equation (t=0 in 1982)	MAD*	Smoothing constant
Teacher-pupil ratio in public elementary schools (high alternative)	TP=49.32+0.47t	0.63	0.4
Teacher-pupil ratio in public secondary schools (high alternative)	TP=60.20+0.85t	0.66	0.4
Teacher-pupil ratio in private elementary schools (high alternative)	TP=53.45+0.97t	0.75	0.4
Teacher-pupil ratio in private secondary schools (high alternative)	TP=68.70+0.60t	1.98	0.2
New teacher graduates as a percentage of bachelor's degrees (low alternative)	ln(NTG-10)=1.45−0.17t	0.11	0.3

*MAD = Mean absolute deviation

Table 25.—Replacement (turnover) rates for classroom teachers in regular elementary and secondary schools: 1970 to 1992

Year	Low alternative	Intermediate alternative	High alternative
1970	—	6.0	—
1971	—	6.0	—
1972	—	6.0	—
1973	—	6.0	—
1974	—	6.0	—
1975	—	6.0	—
1976	—	6.0	—
1977	—	6.0	—
1978	—	6.0	—
1979	—	6.0	—
1980	—	6.0	—
1981	—	6.0	—
1982	—	6.0	—
		Projected	
1983	4.8	6.0	8.0
1984	4.8	6.0	8.0
1985	4.8	6.0	8.0
1986	4.8	6.0	8.0
1987	4.8	6.0	8.0
1988	4.8	6.0	8.0
1989	4.8	6.0	8.0
1990	4.8	6.0	8.0
1991	4.8	6.0	8.0
1992	4.8	6.0	8.0

—Not applicable.

Table 26.—New teacher graduates as a percent of bachelor's degrees: 1970 to 1992

Year	Low alternative	Intermediate alternative	High alternative
1970	—	35.8	—
1971	—	37.4	—
1972	—	35.7	—
1973	—	33.9	—
1974	—	29.5	—
1975	—	25.8	—
1976	—	24.0	—
1977	—	21.1	—
1978	—	19.7	—
1979	—	17.7	—
1980	—	15.5	—
1981	—	15.1	—
1982	—	15.0	—
		Projected	
1983	13.6	15.0	16.0
1984	13.0	15.0	16.5
1985	12.6	15.0	17.0
1986	12.2	15.0	17.5
1987	11.8	15.0	18.0
1988	11.5	15.0	18.5
1989	11.3	15.0	19.0
1990	11.0	15.0	19.5
1991	10.9	15.0	20.0
1992	10.8	15.0	20.5

—Not applicable.

Table 27.—Ratios and percents used to project total and full-time-equivalent senior faculty

Type and control of institution	Ratio of full-time-equivalent senior faculty to 1,000 full-time-equivalent enrollment	Percent of senior full-time-equivalent faculty that is full-time	Full-time-equivalent percent of senior part-time faculty
Public 4-year	66.2	89.7	37.8
Public 2-year	46.1	73.9	29.6
Private 4-year	72.1	85.6	34.4
Private 2-year	39.9	78.2	37.8

Table 28.—Instructional Staff (assumptions)

Variables	Assumptions	Alternatives	Table
Classroom teachers in regular public elementary schools	Teacher-pupil ratios will remain constant at 49 teachers per 1,000 pupils.	low	B-19,B-20
	Teacher-pupil ratios will equal the average of the low and high alternatives.	intermediate	B-19,B-20
	Teacher-pupil ratios will continue increasing, based on past trends.	high	B-19,B-20
Classroom teachers in regular public secondary schools	Teacher-pupil ratios will remain constant at 60.1 teachers per 1,000 pupils.	low	B-19,B-20
	Teacher-pupil ratios will equal the average of the low and high alternatives.	intermediate	B-19,B-20
	Teacher-pupil ratios will continue increasing, based on past trends.	high	B-19,B-20
Classroom teachers in regular private elementary and secondary schools	Teacher-pupil ratios will remain constant at the 1982 level.	low	B-19,B-20
	Teacher-pupil ratios will equal the average of the low and high alternatives.	intermediate	B-19,B-20
	Teacher-pupil ratios will continue increasing, based on past trends.	high	B-19,B-20
Demand for additional teachers in regular schools due to replacement	Replacement (turnover) rates will decrease to a theoretical floor of 4.8 percent.	low	B-21,B-22
	Replacement (turnover) rates will remain at the currently estimated level of 6 percent.	intermediate	B-21,B-22
	Replacement (turnover) rates will return to the historic level of 8 percent.	high	B-21,B-22
Supply of new teacher graduates	The natural logarithm of the percent that new teacher graduates are of bachelor's degree recipients will decrease linearly, based on past trends.	low	B-23
	The percent that new teacher graduates are of bachelor's degree recipients will remain constant at 15 percent.	intermediate	B-23
	The percent that new teacher graduates are of bachelor's degree recipients will increase as a linear function.	high	B-23
Full-time-equivalent senior instructional staff in institutions of higher education	For each type and control of institution, the ratio of full-time-equivalent instructional staff to full-time-equivalent enrollment will remain constant at 1979 levels.	low, intermediate, and high	B-25
Full-time senior instructional staff in institutions of higher education	For each type and control of institution, the percent that full-time staff is of total full-time-equivalent staff will remain constant at 1979 levels.	low, intermediate, and high	B-24,B-25
Part-time senior instructional staff in institutions of higher education	For each type and control of institution, the percent that full-time-equivalent of part-time staff is of part-time staff will remain constant at 1976 levels.	low, intermediate, and high	B-24

Table 29.—Instructional Staff (estimation methods)

Time series	Years	Estimation methods	Table
Classroom teachers in regular public elementary schools	1971-82	The numbers of elementary and secondary teachers reported separately by the National Education Association were prorated to the NCES totals for each year.	B-19,B-20
Classroom teachers in regular private elementary and secondary schools	1969, 1971-75, 1979, 1981 and 1982	For both elementary and secondary levels, teacher-pupil ratios were interpolated. The interpolated ratios were applied to estimates of private enrollment in each year.	B-19,B-20
Full-time-equivalent senior instructional staff	1968, 1969, 1971, 1973-75, 1977, and 1978	For each type and control of institution, the ratio of full-time-equivalent instructional staff to full-time-equivalent enrollment was interpolated. The interpolated ratios were applied to counts of full-time-equivalent enrollment for each year.	B-25
	1980-82	Same methodology as above, with 1979 ratios held constant.	B-25
Full-time senior instructional staff	1968, 1969, 1971, 1973-75, 1977 and 1978	For each type and control of institution, the percent that full-time senior instructional staff was of full-time-equivalent senior instructional staff was interpolated. This percent was applied to estimates of full-time-equivalent senior instructional staff for each year.	B-24,B-25
	1980-82	Same methodology as above, with 1979 ratios held constant.	B-24,B-25
Part-time senior instructional staff	1968, 1969, 1971, and 1973-75	For each type and control of institution, the percent that full-time-equivalent of part-time senior instructional staff was of part-time senior instructional staff was interpolated. This percentage was applied to estimates of part-time senior instructional staff for each year.	B-24
	1977-82	Same methodology as above, with 1976 ratios held constant.	B-24

CHAPTER 5

Accuracy of NCES' 1966-1982 Projections

This chapter examines the accuracy of past NCES projections. Projections of enrollments, graduates, degrees and instructional staff are summarized, with primary reference to the projection error. Although the accuracy of past projections gives no assurance that the current projections will show similar levels of accuracy, a study of the accuracy of past projections might be helpful to users in determining how much weight to give to the projections in making decisions.

Projections of educational data for elementary and secondary schools and institutions of higher education were evaluated for a number of variables. They included projections of elementary and secondary enrollment, higher education enrollment, high school graduates, earned degrees and instructional staff. For these variables, projections for 1 year through 10 years into the future have been shown in each of the last 12 annual and 2 biennial editions of *Projections of Education Statistics*, for 1966 through 1982. For most variables, 14 sets of 10 projections are available to be examined. For some variables, however, the evaluation was performed on fewer than 14 sets of projections because of changes in definitions and projection models. For instance, 8 sets of projections were used for bachelor's degrees and only 3 sets of projections were available for enrollment in higher education.

Method of Analysis

In this study, accuracy was determined through an examination of projection errors. For each variable, the projection error was computed as the difference between the projected value and the reported value for the same year. These differences were then grouped by the lead time of the projections (1 year into the future, 2 years into the future, etc.). Next, these differences were converted into percentages where a positive value represented an overprojection and a negative value represented an underprojection. Finally, the absolute value of the percentage errors was taken and averaged for each lead time, resulting in a very useful measure of projection errors called the mean absolute percentage error (MAPE). This measure was the principal statistic used in this study to determine the accuracy of past NCES projections. This accuracy statistic is defined as follows:

$$\text{MAPE} = \sum_{t=1}^{n} |100(\hat{X}_t - X_t)/X_t| \; /n$$

where:

$\hat{x}_t$ = projected value

x_t = reported value

$(\hat{x}_t - x_t)$ = projection error

n = number of observations

t = the year of both the reported data and projection

The MAPE is a measure of accuracy commonly used to evaluate forecasts from microeconomic models. The measure is independent of the units of measurement of the variables to which they refer and therefore is helpful in making comparisons among projections from different situations. This measure is only one of the measures used to evaluate projection errors.[1] A discussion of these measures of accuracy is presented in detail in an unpublished NCES report.[2] For more information on this report, contact the authors of this publication.

Results

Below are results describing the overall performance of past NCES projections by educational level. Following these analyses, table 30 gives a summary of mean absolute percentage errors by lead time of projections of enrollment, high school graduates, and classroom teachers in public elementary and secondary schools. Table 31 presents a summary of the mean absolute percentage errors by lead time of projections of enrollment and earned degrees in institutions of higher education.

[1] The evaluation also looked at the mean square error (MSE) which was further decomposed into the sum of the contributory sources of errors—model error and data error.

[2] Frankel, Martin M. and Debra E. Gerald, U.S. Department of Education, National Center for Education Statistics, "Projections of Education Statistics: An Analysis of Projection Errors," unpublished paper (1983).

Elementary and Secondary

At the elementary and secondary level, projections of enrollment, high school graduates, and classroom teachers in public schools have been quite accurate. Projections of enrollment in grades K-12, K-8 and 9-12 in regular public elementary and secondary schools have been very accurate, especially for shorter lead time of 1 to 5 years (table 30).

For projections of enrollment in grades K-12, the mean absolute percentage errors (MAPE) for lead times of 1, 2, and 5 years have been less than 1 percent — 0.2, 0.4 and 0.8 percent, respectively. For projections of enrollment in grades K-8, the MAPEs for lead times of 1, 2, and 5 years were 0.3, 0.6, and 0.9 percent respectively, while those for projections of enrollment in grades 9-12 were 0.6, 0.8, and 2.0 percent for the same lead times. For lead times of 6 to 10 years, the MAPEs increased moderately for projections of enrollment in grades K-12, K-8, and 9-12, from 1.1 percent to 7.2 percent for grades K-12, 1.2 percent to 8.8 percent for grades K-8, and 2.5 percent to 5.3 percent for grades 9-12. Although the error associated with these projections increased for longer lead times—6 to 10 years—these enrollment projections have been more accurate than most projections evaluated in this study.

Projections of public high school graduates have been fairly accurate for short lead times. For lead times of 1, 2, and 5 years, the MAPEs were 1.1, 2.1 and 4.3 percent, respectively. However, for longer lead times, the errors increased more rapidly, from 5.2 percent for a lead time of 6 years, to 12.9 percent for a lead time of 10 years. It appears that these larger errors were due to the use of logistic growth curves during the 1970's to project the percent that public high school graduates were of the 18-year-old population. This caused significant overprojections of graduates. Since then, a constant model has been used to project high school graduates in regular public secondary schools, yielding fairly accurate projections.

Projections of classroom teachers in public schools have been fairly accurate for most lead times and very accurate for long lead times. For lead times of 1, 2, and 5 years, the MAPEs were 0.9, 1.5, and 3.7 percent, respectively. For longer lead times, the MAPEs increased from 4.0 for a lead time of 6 years, to only 4.7 percent for a lead time of 10 years.

In general, NCES projections of enrollment, high school graduates, and classroom teachers have been fairly accurate, especially for projections from 1 to 5 years. For longer lead times, the MAPEs increased for these variables. It is characteristic of projections to become "progressively less reliable as the span of the projection increases..."[3]

Higher Education

At the higher education level, projections of enrollment have been fairly accurate since the introduction in 1978 of an age-specific enrollment rate model which included all ages of college students. This study evaluates only the enrollment data available since this model's inception.

Projections of bachelor's, master's, and doctor's degrees have not been as accurate as projections of other variables examined in the study. However, projections of bachelor's and first-professional degrees (with the exception of women) have been more accurate than projections of master's and doctor's degrees for short lead times. For lead times beyond 5 years, the MAPEs for projections of degrees are very large with the exceptions of those for women at the bachelor's and master's degree levels and total degrees at the first-professional level.

For enrollment, evaluation of projections in institutions of higher education from the last three editions of *Projections* revealed that these projections have been fairly accurate. For total enrollment, the MAPEs for lead times of 1, 2, and 4 years were 0.4, 2.3, and 5.0 percent, respectively. Projections of full-time-equivalent enrollment have been just as accurate. For lead times of 1, 2, and 4 years, the MAPEs were 0.7, 1.9, and 4.3 percent, respectively.

For enrollment in higher education by detail category, the current model's projections were fairly accurate for most variables. By sex, projections of enrollment were more accurate for men than for women. For lead times of 1, 2, and 4 years, MAPEs for enrollment projections of men were 3.3, 4.0, and 3.6 percent, respectively. The MAPEs for enrollment projection of women were 3.3, 4.6, and 11.7 percent. By attendance status, projections of enrollments were fairly accurate. Full-time enrollment projections for lead times 1, 2, and 4 years had MAPEs of 1.1, 2.7, and 5.5 percent, respectively. MAPEs for projections of part-time enrollment were 1.5, 2.3, and 4.2 percent. By control, enrollment projections in public institutions were more accurate than enrollment projections in private institutions. The MAPEs for the former were 0.7, 2.9, and 3.4 percent, respectively, while MAPEs for the latter were 2.2, 3.8, and 10.7 percent. For projection of graduate enrollment, the MAPEs for lead times of 1, 2, and 4 years were 3.9, 4.8, and 4.5 percent, respectively.

By degree level, projections of degrees have not been as accurate as other projections in the study. Projections of bachelor's degrees, based primarily on demographic models, have been relatively accurate for short lead times. For lead times of 1, 2, and 5 years, the MAPEs were 2.4, 2.4, and 8.6 percent, respectively. Although the MAPEs for the short term are larger than those for enrollments, high school graduates, and teachers, they are smaller than those for the other degree levels.

By sex, projections of bachelor's degrees awarded to women have been more accurate overall then projections for

[3]Fredard, Mark S., Barry J. Greengart and Myron J. Katzoof, U.S. Department of Health, Education, and Welfare, Public Health Service, Health Care Finance Agency, "Projections of National Health Expenditures, 1977-82." p. 6.

men. For lead times of 1, 2, and 5 years, MAPEs for men were 2.9, 3.0, and 9.7 percent, respectively. For the same lead times, MAPEs for women were 2.4, 3.3, and 7.6 percent, respectively.

Projections of master's degrees have not been very accurate with the exception of a lead time of 1 year. MAPEs for lead times of 1, 2, and 5 years were 2.8, 5.1, and 11.0 percent, respectively. Like bachelor's degrees, projections of master's degrees for women have been more accurate than those for men. For lead times of 1, 2, and 5 years, MAPEs for men were 3.2, 5.8, and 14.6 percent, respectively. MAPEs for women, however, were 2.7, 5.4 and 12.0 percent.

Projections of doctor's degrees have not been very accurate. These projections, in fact, exhibited larger errors for long lead times than any other degree level. For total doctor's degrees, the MAPEs for lead times of 1, 2, and 5 years were 3.0, 6.7, and 21.5 percent, respectively. By sex, MAPEs for lead times of 1, 2, and 5 years for men were 2.7, 7.0, and 25.9 percent and for women were 5.8, 9.0, and 14.9 percent, respectively.

Projections of first-professional degrees have been fairly accurate for short lead times. For lead times of 1, 2, and 5 years, the MAPEs were 2.2, 4.1, and 7.4 percent, respectively.

By sex, projections of first-professional degrees awarded to men were considerably more accurate than projections of first-professional degrees awarded to women. For lead times of 1, 2, and 5 years, the MAPEs for men were 2.5, 4.3, and 4.8 percent, respectively, and for women were 7.1, 6.1, and 26.0 percent, respectively. For long lead times, the MAPEs for projections of first-professional degrees awarded to women are much larger than for men. This is the result of the rapid rise in the number of degrees earned by women over the past 10 years.

As table 31 shows, the errors for medium- to long-term projection of all degrees for both men and women are considerably larger than most errors in this study, thereby making these projections less and less reliable as the span of the lead times increases beyond 5 years.

Overall, projections of enrollment, high school graduates, and classroom teachers in public elementary and secondary schools have been considerably more accurate than projections of enrollment and earned degrees in higher education. This is a result of the greater certainty with which these projections can be made at the elementary and secondary level. This is especially true for enrollment. At the elementary and secondary level, enrollment rates for most of the school-age population are close to 100 percent. Consequently, demographics largely determine the level of enrollment in elementary and secondary schools, as exemplified by the smaller errors. Projections of high school graduates and classroom teachers, which are based on projections of enrollments and school-age populations, also exhibit smaller errors.

In higher education, however, students have more choices. Unlike elementary and secondary schools, where attendance is mandatory for most students through age 16, enrollment in institutions of higher education is subject to much more variability. Higher education enrollments are affected by many social and economic factors such a unemployment levels, the cost of a college education, family income, levels of student aid, and the economic value of a college education. Although most of these factors are not readily quantifiable, projections of enrollment in higher education have been fairly accurate. Still, the MAPEs are only slightly larger than those for projections of elementary and secondary enrollment for the short term.

Projections of degrees have been even less accurate because of the uncertainties of modelling degree relationships. This becomes more difficult as the degree level rises. The use of alternative projections, however, minimizes the uncertainty of degree projections as well as enrollment projections.

Table 30.—Summary of mean absolute percentage errors of projections of selected elementary and secondary statistics, by lead time

Variable	Lead time or forecast horizon									
	1	2	3	4	5	6	7	8	9	10
Enrollment										
K-12 enrollment, public	0.2	0.4	0.6	0.7	0.8	1.1	1.8	3.0	4.9	7.2
K-8 enrollment, public	0.3	0.6	0.8	0.9	0.9	1.2	2.1	3.4	5.8	8.8
9-12 enrollment, public	0.6	0.8	1.0	1.3	2.0	2.5	2.9	3.8	4.6	5.3
Graduates										
High school graduates, public	1.1	2.1	2.6	3.5	4.3	5.2	6.2	7.9	10.1	12.4
Teachers										
Classroom teachers, public	0.9	1.5	2.2	3.0	3.7	4.0	4.4	4.5	4.4	4.7

Table 31.—Summary of mean absolute percentage errors of projections of selected higher education statistics, by lead time

Variable	Lead time or forecast horizon									
	1	2	3	4	5	6	7	8	9	10
Enrollment										
Total	0.4	2.3	3.0	5.0						
Men	3.3	4.0	4.4	3.6						
Women	3.3	4.6	9.6	11.7						
Full-time	1.1	2.7	2.7	5.5						
Part-time	1.5	2.3	3.5	4.2						
Public	0.7	2.9	3.2	3.4						
Private	2.2	3.8	8.2	10.7						
Full-time-equivalent	0.7	1.9	2.3	4.3						
Graduate	3.9	4.8	4.5	4.5						
Degrees										
Bachelor's, total	2.4	2.4	3.9	5.5	8.6	9.9	11.9	14.5	15.1	18.2
Bachelor's, men	2.9	3.0	4.1	6.6	9.7	12.5	15.1	19.4	21.0	26.1
Bachelor's, women	2.4	3.3	5.0	6.3	7.6	7.5	8.5	9.5	9.0	11.9
Master's, total	2.8	5.1	7.4	9.1	11.0	11.5	10.2	9.1	13.2	20.6
Master's, men	3.2	5.8	8.2	10.8	14.6	17.7	19.5	21.0	27.6	38.5
Master's, women	2.7	5.4	7.2	9.8	12.0	13.1	10.5	6.3	5.5	9.2
Doctor's, total	3.0	6.7	10.7	14.9	21.5	25.2	30.8	35.7	42.1	50.5
Doctor's, men	2.7	7.0	12.1	18.0	25.9	32.3	40.0	50.3	64.1	77.7
Doctor's, women	5.8	9.0	12.4	15.0	14.9	16.4	18.7	19.9	20.6	23.3
First-professional, total	2.2	4.1	6.6	7.6	7.4	8.3	9.0	10.2	10.6	9.5
First-professional, men	2.5	4.3	5.6	6.2	4.8	5.1	5.8	7.2	10.5	17.8
First-professional, women	7.1	6.1	11.0	16.9	26.0	29.9	37.9	46.1	52.6	55.4

APPENDIX A

Statistical Tables

This appendix presents tables of demographic time series data that were used to produce projections shown in appendix B of this report.

Table A-1 presents estimates and projections of the number of annual births. Tables A-2 through A-9 present estimates and projections of the preprimary, school-age, and college-age populations, by individual ages and age-groups. Tables A-9 and A-10 present time series data on enrollment variables used to project bachelor's and master's degrees.

Table A-1.—Annual number of births (U.S. Census Projections Middle Series): 50 States and D.C., 1940 to 1992
(In thousands)

Year (July 1 - June 30)	Births
1940-41	2,631
1941-42	2,789
1942-43	3,168
1943-44	2,989
1944-45	2,937
1945-46	2,873
1946-47	3,948
1947-48	3,658
1948-49	3,660
1949-50	3,638
1950-51	3,771
1951-52	3,859
1952-53	3,951
1953-54	4,045
1954-55	4,119
1955-56	4,167
1956-57	4,312
1957-58	4,313
1958-59	4,298
1959-60	4,279
1960-61	4,350
1961-62	4,259
1962-63	4,185
1963-64	4,119
1964-65	3,940
1965-66	3,716
1966-67	3,608
1967-68	3,520
1968-69	3,583
1969-70	3,676
1970-71	3,713
1971-72	3,393
1972-73	3,195
1973-74	3,111
1974-75	3,185
1975-76	3,126
1976-77	3,274
1977-78	3,304
1978-79	3,384
1979-80	3,543
1980-81	3,628
1981-82	3,677
1982-83	3,694
Projected	
1983-84	3,788
1984-85	3,826
1985-86	3,855
1986-87	3,873
1987-88	3,879
1988-89	3,871
1989-90	3,849
1990-91	3,815
1991-92	3,772
1992-93	3,725

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, "Population Estimates and Projections," Series P-25.

Table A-2.—Preprimary school-age populations (U.S. Census Projections, Middle Series): 50 States and D.C., 1970 to 1992

(In thousands)

Year (July 1)	3 years old	4 years old	5 years old	3-5 years old
1970	3,407	3,555	3,757	10,719
1971	3,337	3,468	3,557	10,362
1972	3,392	3,397	3,469	10,258
1973	3,486	3,452	3,397	10,335
1974	3,571	3,546	3,450	10,567
1975	3,277	3,635	3,546	10,458
1976	3,101	3,336	3,634	10,071
1977	3,035	3,155	3,334	9,524
1978	3,117	3,091	3,156	9,364
1979	3,077	3,175	3,092	9,344
1980	3,227	3,121	3,182	9,530
1981	3,218	3,234	3,129	9,581
1982	3,356	3,225	3,241	9,822
		Projected		
1983	3,565	3,362	3,231	10,158
1984	3,598	3,570	3,367	10,535
1985	3,651	3,604	3,576	10,831
1986	3,693	3,657	3,609	10,959
1987	3,743	3,699	3,662	11,104
1988	3,785	3,749	3,704	11,238
1989	3,819	3,791	3,754	11,364
1990	3,843	3,825	3,797	11,465
1991	3,856	3,849	3,830	11,535
1992	3,856	3,862	3,854	11,572

Source: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, "Population Estimates and Projections," Series P-25.

Table A-3.—School-age populations (U.S. Census Projections, Middle Series), ages 5, 6, 5-13, and 14-17 years: 50 States and D.C., 1970 to 1992

(In thousands)

Year (July 1)	5 years old	6 years old	5-13 years old	14-17 years old
1970	3,757	3,946	36,672	15,924
1971	3,557	3,787	36,236	16,328
1972	3,469	3,582	35,679	16,639
1973	3,397	3,491	35,046	16,867
1974	3,450	3,414	34,465	17,035
1975	3,546	3,468	33,919	17,128
1976	3,634	3,560	33,516	17,119
1977	3,334	3,644	32,855	17,045
1978	3,156	3,343	32,094	16,946
1979	3,092	3,164	31,431	16,611
1980	3,182	3,111	31,080	16,139
1981	3,129	3,189	30,660	15,568
1982	3,241	3,136	30,431	14,963
		Projected		
1983	3,231	3,247	30,083	14,614
1984	3,367	3,237	29,767	14,612
1985	3,576	3,374	29,654	14,731
1986	3,609	3,582	29,922	14,587
1987	3,662	3,616	30,358	14,236
1988	3,704	3,669	30,953	13,662
1989	3,754	3,711	31,523	13,160
1990	3,797	3,761	32,189	12,950
1991	3,830	3,803	32,778	12,964
1992	3,854	3,836	33,400	13,087

Source: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, "Population Estimates and Projections," Series P-25.

Table A-4.—College-age populations (U.S. Census projections, Middle Series), ages 18, 18–24, 25–34, and 35–44 years: 50 States and D.C., 1970 to 1992

(In thousands)

Year (July 1)	18 years old	18–24 years old	25–34 years old	35–44 years old
1970	3,781	24,712	25,323	23,150
1971	3,878	25,874	25,958	22,978
1972	3,976	26,076	27,623	22,859
1973	4,053	26,635	28,939	22,810
1974	4,103	27,233	30,225	22,826
1975	4,256	28,005	31,471	22,831
1976	4,266	28,645	32,759	23,093
1977	4,257	29,174	33,998	22,563
1978	4,247	29,622	34,963	24,437
1979	4,316	30,048	36,203	25,176
1980	4,257	30,347	37,593	25,881
1981	4,236	30,447	38,983	26,513
1982	4,188	30,367	39,481	28,144
		Projected		
1983	4,015	30,079	40,240	29,449
1984	3,774	29,501	41,020	30,735
1985	3,658	28,739	41,788	32,004
1986	3,574	27,838	42,515	33,291
1987	3,667	27,246	43,098	34,419
1988	3,772	26,783	43,429	35,366
1989	3,777	26,375	43,620	36,562
1990	3,431	25,794	43,529	37,847
1991	3,317	25,338	43,159	39,207
1992	3,199	24,881	42,548	39,704

Source: U.S. Department of Commerce, Bureau of the Census: *Current Population Reports*, "Population Estimates and Projections," Series P-25.

Table A-5.—School-age populations, male, by individual ages 3–15 years: 50 States and D.C.: 1970 to 1992
(In thousands)

Year (July 1)	3 years old	4 years old	5 years old	6 years old	7 years old	8 years old	9 years old	10 years old	11 years old	12 years old	13 years old	14 years old	15 years old
1970	1,735	1,812	1,914	2,010	2,049	2,055	2,124	2,174	2,107	2,129	2,126	2,088	2,062
1971	1,702	1,766	1,815	1,924	2,030	2,027	2,090	2,212	2,110	2,126	2,135	2,168	2,091
1972	1,729	1,732	1,768	1,824	1,946	2,003	2,065	2,172	2,151	2,124	2,132	2,173	2,172
1973	1,778	1,759	1,734	1,776	1,848	1,916	2,045	2,142	2,117	2,161	2,132	2,168	2,179
1974	1,826	1,808	1,759	1,740	1,802	1,814	1,960	2,116	2,092	2,124	2,172	2,165	2,176
1975	1,672	1,859	1,809	1,766	1,770	1,766	1,861	2,026	2,073	2,096	2,137	2,203	2,177
1976	1,582	1,702	1,859	1,814	1,799	1,730	1,815	1,919	1,987	2,072	2,109	2,163	2,216
1977	1,552	1,611	1,702	1,863	1,851	1,753	1,780	1,867	1,887	1,983	2,086	2,131	2,177
1978	1,593	1,581	1,612	1,706	1,905	1,801	1,811	1,830	1,841	1,881	1,999	2,106	2,150
1979	1,571	1,624	1,582	1,615	1,749	1,850	1,864	1,857	1,809	1,833	1,898	2,016	2,127
1980	1,651	1,596	1,628	1,591	1,654	1,717	1,899	1,900	1,846	1,803	1,846	1,913	2,036
1981	1,646	1,654	1,600	1,632	1,595	1,658	1,721	1,904	1,905	1,852	1,808	1,851	1,918
1982	1,717	1,649	1,658	1,604	1,636	1,599	1,663	1,726	1,909	1,910	1,857	1,813	1,856
Projected													
1983	1,822	1,720	1,652	1,661	1,607	1,640	1,603	1,667	1,730	1,913	1,914	1,860	1,816
1984	1,841	1,825	1,723	1,655	1,664	1,610	1,643	1,607	1,671	1,734	1,916	1,917	1,863
1985	1,867	1,844	1,828	1,726	1,658	1,668	1,614	1,647	1,611	1,675	1,738	1,920	1,920
1986	1,890	1,870	1,847	1,831	1,729	1,662	1,671	1,618	1,651	1,615	1,678	1,741	1,923
1987	1,916	1,893	1,873	1,850	1,834	1,732	1,665	1,675	1,622	1,655	1,619	1,682	1,745
1988	1,937	1,918	1,896	1,876	1,853	1,837	1,736	1,669	1,679	1,626	1,659	1,623	1,685
1989	1,954	1,940	1,921	1,899	1,879	1,856	1,841	1,739	1,673	1,683	1,630	1,663	1,626
1990	1,967	1,957	1,943	1,924	1,902	1,882	1,860	1,845	1,743	1,677	1,687	1,633	1,666
1991	1,974	1,970	1,960	1,946	1,927	1,905	1,886	1,863	1,849	1,748	1,681	1,691	1,637
1992	1,974	1,976	1,972	1,963	1,949	1,931	1,908	1,890	1,867	1,853	1,751	1,685	1,694

Source: U.S. Department of Commerce, Bureau of the Census: *Current Population Reports*, "Population Estimates and Projections," Series P-25.

Table A-6.—College-age population, male, by individual ages and age groups 16-34 years: 50 States and D.C.: 1970 to 1992

(In thousands)

Year (July 1)	16 years old	17 years old	18 years old	19 years old	20 years old	21 years old	22 years old	23 years old	24 years old	25-29 years old	30-34 years old	Total 18-24 years old	Total 25-34 years old
1970	2,001	1,958	1,914	1,882	1,848	1,800	1,757	1,861	1,389	6,821	5,716	12,451	12,537
1971	2,047	2,009	1,962	1,939	1,924	1,799	1,759	1,729	1,919	6,980	5,880	13,031	12,860
1972	2,076	2,054	2,010	1,995	1,977	1,875	1,762	1,736	1,781	7,588	6,115	13,135	13,703
1973	2,158	2,083	2,052	2,052	2,028	1,928	1,839	1,741	1,784	7,867	6,500	13,425	14,367
1974	2,167	2,165	2,078	2,104	2,079	1,978	1,892	1,819	1,786	8,237	6,775	13,736	15,012
1975	2,167	2,175	2,159	2,139	2,126	2,030	1,944	1,876	1,863	8,617	7,018	14,137	15,635
1976	2,168	2,173	2,164	2,229	2,153	2,075	1,996	1,930	1,917	9,133	7,167	14,465	16,300
1977	2,207	2,172	2,159	2,242	2,236	2,103	2,041	1,985	1,968	9,115	7,791	14,733	16,906
1978	2,172	2,213	2,157	2,247	2,244	2,186	2,072	2,034	2,021	9,319	8,073	14,961	17,392
1979	2,146	2,177	2,196	2,254	2,243	2,197	2,158	2,070	2,069	9,571	8,444	15,186	18,015
1980	2,132	2,163	2,166	2,270	2,243	2,207	2,183	2,166	2,102	9,877	8,846	15,335	18,723
1981	2,040	2,136	2,166	2,170	2,273	2,246	2,210	2,186	2,169	10,090	9,340	15,420	19,430
1982	1,922	2,044	2,140	2,170	2,173	2,276	2,248	2,213	2,189	10,397	9,297	15,409	19,694
Projected													
1983	1,858	1,924	2,046	2,141	2,171	2,174	2,227	2,250	2,215	10,612	9,481	15,273	20,093
1984	1,818	1,861	1,926	2,047	2,142	2,172	2,175	2,278	2,251	10,803	9,701	14,991	20,504
1985	1,866	1,821	1,863	1,928	2,049	2,143	2,173	2,176	2,280	10,970	9,936	14,611	21,906
1986	1,923	1,868	1,823	1,864	1,929	2,050	2,144	2,174	2,178	11,145	10,141	14,163	21,286
1987	1,926	1,925	1,870	1,825	1,866	1,931	2,051	2,145	2,176	11,153	10,445	13,865	21,598
1988	1,747	1,928	1,927	1,872	1,827	1,868	1,932	2,053	2,147	11,140	10,659	13,626	21,799
1989	1,688	1,750	1,930	1,929	1,874	1,828	1,869	1,934	2,055	11,073	10,848	13,419	21,921
1990	1,629	1,691	1,752	1,932	1,931	1,875	1,830	1,871	1,936	10,878	11,014	13,126	21,892
1991	1,669	1,632	1,693	1,754	1,933	1,932	1,877	1,832	1,874	10,537	11,189	12,895	21,726
1992	1,640	1,672	1,634	1,695	1,756	1,935	1,934	1,879	1,834	10,234	11,197	12,667	21,431

Source: U.S. Department of Commerce, Bureau of the Census: *Current Population Reports*, "Population Estimates and Projections," Series P-25.

Table A-7.—School-age populations, female, by individual ages 3–15 years: 50 States and D.C.: 1970 to 1992

(In thousands)

Year (July 1)	3 years old	4 years old	5 years old	6 years old	7 years old	8 years old	9 years old	10 years old	11 years old	12 years old	13 years old	14 years old	15 years old
1970	1,671	1,743	1,843	1,936	1,971	1,977	2,040	2,090	2,032	2,046	2,049	2,013	1,982
1971	1,635	1,702	1,742	1,863	1,948	1,948	2,009	2,122	2,029	2,049	2,058	2,087	2,010
1972	1,663	1,665	1,701	1,759	1,878	1,920	1,984	2,084	2,065	2,043	2,061	2,093	2,085
1973	1,708	1,693	1,663	1,715	1,776	1,846	1,960	2,053	2,033	2,075	2,054	2,094	2,094
1974	1,746	1,738	1,691	1,675	1,734	1,741	1,890	2,023	2,007	2,039	2,087	2,086	2,097
1975	1,605	1,777	1,737	1,702	1,698	1,698	1,788	1,947	1,984	2,011	2,052	2,118	2,092
1976	1,518	1,633	1,776	1,746	1,728	1,658	1,748	1,837	1,913	1,983	2,023	2,080	2,124
1977	1,483	1,544	1,632	1,782	1,775	1,683	1,710	1,790	1,809	1,908	1,995	2,048	2,087
1978	1,524	1,509	1,545	1,637	1,816	1,726	1,741	1,749	1,769	1,803	1,922	2,020	2,059
1979	1,506	1,551	1,510	1,549	1,672	1,763	1,791	1,777	1,733	1,761	1,817	1,944	2,033
1980	1,576	1,525	1,553	1,520	1,582	1,641	1,813	1,814	1,770	1,728	1,776	1,833	1,957
1981	1,572	1,579	1,529	1,557	1,524	1,586	1,645	1,817	1,819	1,774	1,773	1,780	1,837
1982	1,639	1,576	1,583	1,533	1,561	1,528	1,591	1,649	1,822	1,823	1,779	1,737	1,784
						Projected							
1983	1,743	1,642	1,579	1,586	1,536	1,565	1,532	1,594	1,653	1,826	1,827	1,783	1,741
1984	1,757	1,745	1,645	1,582	1,589	1,539	1,568	1,535	1,598	1,657	1,829	1,831	1,786
1985	1,784	1,760	1,748	1,648	1,585	1,593	1,543	1,572	1,539	1,602	1,661	1,833	1,834
1986	1,803	1,786	1,763	1,752	1,651	1,589	1,596	1,546	1,575	1,543	1,606	1,665	1,837
1987	1,827	1,806	1,789	1,766	1,755	1,655	1,592	1,600	1,550	1,579	1,547	1,610	1,668
1988	1,848	1,830	1,809	1,792	1,769	1,758	1,658	1,596	1,604	1,554	1,583	1,551	1,613
1989	1,864	1,851	1,833	1,812	1,796	1,772	1,762	1,662	1,600	1,607	1,558	1,587	1,554
1990	1,876	1,867	1,854	1,836	1,815	1,799	1,776	1,765	1,665	1,604	1,611	1,562	1,591
1991	1,883	1,879	1,870	1,857	1,840	1,818	1,802	1,779	1,769	1,669	1,607	1,615	1,565
1992	1,883	1,885	1,882	1,873	1,860	1,843	1,822	1,806	1,783	1,773	1,673	1,611	1,619

Source: U.S. Department of Commerce, Bureau of the Census: *Current Population Reports*, "Population Estimates and Projections," Series P-25.

Table A-8.—College-age populations, female, by individual ages and age groups 16-34 years: 50 States and D.C.: 1970 to 1992
(In thousands)

Year (July 1)	16 years old	17 years old	18 years old	19 years old	20 years old	21 years old	22 years old	23 years old	24 years old	25-29 years old	30-34 years old	Total 18-24 years old	Total 25-34 years old
1970	1,931	1,890	1,868	1,846	1,805	1,756	1,737	1,856	1,393	6,915	5,872	12,261	12,787
1971	1,972	1,944	1,917	1,897	1,872	1,755	1,750	1,731	1,921	7,062	6,036	12,843	13,098
1972	2,002	1,984	1,966	1,952	1,919	1,822	1,749	1,746	1,788	7,653	6,269	12,941	13,922
1973	2,079	2,012	2,000	2,009	1,970	1,870	1,817	1,747	1,798	7,920	6,652	13,211	14,572
1974	2,090	2,089	2,024	2,051	2,023	1,923	1,865	1,816	1,795	8,284	6,930	13,497	15,214
1975	2,096	2,100	2,097	2,084	2,062	1,978	1,919	1,867	1,862	8,663	7,173	13,868	15,836
1976	2,092	2,103	2,101	2,164	2,090	2,018	1,975	1,923	1,910	9,162	7,318	14,180	16,480
1977	2,126	2,097	2,099	2,175	2,164	2,047	2,015	1,979	1,961	9,162	7,929	14,441	17,091
1978	2,094	2,133	2,090	2,183	2,174	2,126	2,047	2,025	2,017	9,364	8,207	14,661	17,571
1979	2,068	2,099	2,121	2,181	2,177	2,138	2,127	2,060	2,059	9,606	8,581	14,861	18,187
1980	2,040	2,066	2,091	2,209	2,186	2,160	2,141	2,140	2,085	9,889	8,981	15,012	18,870
1981	1,961	2,045	2,070	2,095	2,214	2,191	2,165	2,146	2,146	10,085	9,468	15,027	19,553
1982	1,841	1,965	2,049	2,074	2,100	2,219	2,196	2,170	2,152	10,372	9,415	14,959	19,787
Projected													
1983	1,788	1,845	1,969	2,053	2,078	2,105	2,224	2,202	2,176	10,558	9,598	14,807	20,147
1984	1,744	1,791	1,848	1,973	2,057	2,083	2,110	2,230	2,208	10,724	9,792	14,570	20,516
1985	1,789	1,748	1,795	1,853	1,977	2,062	2,089	2,116	2,236	10,869	10,014	14,128	20,883
1986	1,838	1,793	1,751	1,799	1,857	1,982	2,068	2,095	2,122	11,021	10,027	13,675	21,048
1987	1,840	1,841	1,797	1,755	1,804	1,862	1,988	2,074	2,101	10,998	10,496	13,381	21,494
1988	1,672	1,843	1,845	1,801	1,760	1,809	1,868	1,994	2,080	10,948	10,682	13,157	21,630
1989	1,617	1,675	1,847	1,849	1,806	1,765	1,815	1,874	2,000	10,852	10,847	12,956	21,699
1990	1,558	1,620	1,679	1,851	1,854	1,811	1,771	1,821	1,881	10,645	10,992	12,667	21,637
1991	1,594	1,561	1,624	1,683	1,856	1,859	1,816	1,777	1,827	10,290	11,144	12,443	21,434
1992	1,569	1,598	1,565	1,628	1,688	1,861	1,864	1,823	1,784	9,995	11,122	12,213	21,117

Source: U.S. Department of Commerce, Bureau of the Census: *Current Population Reports*, "Population Estimates and Projections," Series P-25

BEST COPY AVAILABLE

Table A-9.—Full-time 4th-year undergraduate enrollment variables used to project bachelor's degrees, with projections, by sex: 1967 to 1992

(In thousands)

Year	Men	Women
1967	340	278
1968	432	354
1969	450	369
1970	451	369
1971	479	393
1972	499	409
1973	455	373
1974	537	440
1975	502	411
1976	495	397
1977	496	414
1978	486	422
1979	482	434
1980	488	452
1981	495	466
1982	509	481
Projected		
1983	493	462
1984	491	460
1985	488	457
1986	485	454
1987	484	453
1988	484	453
1989	485	454
1990	482	451
1991	478	448
1992	471	441

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Fall Enrollment in Higher Education*, various years and U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, "School Enrollment—Social and Economic Characteristics of Students," Series P-20.

Table A-10.—Full-time graduate enrollment variables to project master's degrees, with projections, by sex: 1970 to 1992

(In thousands)

Year	Men	Women
1970	264	115
1971	269	119
1972	268	126
1973	273	137
1974	276	151
1975	290	163
1976	287	176
1977	289	183
1978	284	189
1979	280	196
1980	281	204
1981	277	207
1982	280	205
Projected		
1983	294	212
1984	308	212
1985	311	217
1986	313	218
1987	313	220
1988	310	218
1989	307	217
1990	302	215
1991	301	214
1992	299	213

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Fall Enrollment in Higher Education*, various years.

BEST COPY AVAILABLE

BEST COPY AVAILABLE

APPENDIX B

Detailed Projection Tables

This appendix presents time series on reported and projected data for statistics in elementary and secondary schools and institutions of higher education. Data are shown for enrollments, high school graduates, earned degrees, and instructional staff.

Table B-1.—Nursery and kindergarten enrollment with alternative projections, by age of student and control of school: 50 States and D.C., fall 1970 to 1992*

(In thousands)

Fall of Year	Total	Public						Private				
		Total	3 Years Old	4 Years Old	5 Years Old	6 Years Old		Total	3 Years Old	4 Years Old	5 Years Old	6 Years Old
1970.....	4,279	2,981	123	494	2,214	150		1,298	332	512	429	25
1971.....	4,330	3,007	107	486	2,254	160		1,323	323	562	417	21
1972.....	4,417	3,036	150	532	2,188	166		1,381	385	588	387	21
1973.....	4,399	2,982	137	518	2,175	152		1,417	378	659	368	12
1974.....	4,858	3,149	178	543	2,280	148		1,709	506	778	413	12
1975.....	5,141	3,425	191	645	2,417	172		1,716	492	773	437	14
1976.....	4,996	3,418	180	608	2,451	179		1,578	422	740	389	27
1977.....	4,806	3,225	198	591	2,242	194		1,581	447	699	400	35
1978.....	4,813	3,161	233	601	2,132	195		1,652	526	712	379	35
1979.....	4,895	3,230	232	606	2,177	215		1,665	514	787	348	16
1980.....	5,162	3,322	237	602	2,227	256		1,840	620	821	370	29
1981.....	5,218	3,279	268	588	2,176	247		1,939	623	853	427	36
1982.....	5,451	3,476	340	602	2,247	287		1,975	588	894	434	59
Intermediate alternative projections												
1983.....	5,472	3,485	330	642	2,248	265		1,987	625	903	414	45
1984.....	5,748	3,650	345	697	2,344	264		2,098	640	980	433	45
1985.....	6,018	3,844	362	718	2,489	275		2,174	660	1,010	459	45
1986.....	6,171	3,925	378	743	2,512	292		2,246	690	1,046	463	47
1987.....	6,327	4,007	395	768	2,549	295		2,320	722	1,080	470	48
1988.....	6,476	4,084	412	794	2,579	299		2,392	752	1,116	476	48
1989.....	6,630	4,162	428	819	2,612	303		2,463	781	1,151	482	49
1990.....	6,767	4,236	444	842	2,643	307		2,531	809	1,184	488	50
1991.....	6,888	4,297	457	864	2,665	311		2,591	836	1,213	492	50
1992.....	6,991	4,349	470	882	2,683	314		2,642	858	1,240	494	50

Table B-1.—Nursery and kindergarten enrollment with alternative projections, by age of student and control of school: 50 States and D.C., fall 1970 to 1992* (Continued)

(In thousands)

Fall of Year	Total	Public					Private				
		Total	3 Years Old	4 Years Old	5 Years Old	6 Years Old	Total	3 Years Old	4 Years Old	5 Years Old	6 Years Old
					Low alternative projections						
1983	5,407	3,447	306	628	2,248	265	1,960	620	883	414	43
1984	5,632	3,584	309	667	2,344	264	2,048	635	937	433	43
1985	5,853	3,751	314	673	2,489	275	2,102	652	946	459	45
1986	5,934	3,804	317	683	2,512	292	2,130	660	960	463	47
1987	6,015	3,857	322	691	2,549	295	2,158	669	971	470	48
1988	6,087	3,903	325	700	2,579	299	2,184	676	984	476	48
1989	6,160	3,951	328	708	2,612	303	2,209	682	996	482	49
1990	6,222	3,994	330	714	2,643	307	2,228	686	1,004	488	50
1991	6,269	4,027	332	719	2,665	311	2,242	689	1,011	492	50
1992	6,297	4,050	332	721	2,683	314	2,247	689	1,014	494	50
					High alternative projections						
1983	5,670	3,536	353	670	2,248	265	2,132	733	942	414	45
1984	5,965	3,702	368	726	2,344	264	2,261	764	1,021	433	45
1985	6,253	3,899	386	749	2,489	275	2,354	799	1,051	459	45
1986	6,412	3,979	401	774	2,512	292	2,433	834	1,089	463	47
1987	6,573	4,062	419	799	2,549	295	2,511	870	1,123	470	48
1988	6,708	4,131	436	817	2,579	299	2,577	905	1,148	476	48
1989	6,863	4,211	446	850	2,612	303	2,652	926	1,195	482	49
1990	7,009	4,286	462	874	2,643	307	2,723	958	1,227	488	50
1991	7,155	4,354	483	895	2,665	311	2,801	1,001	1,258	492	50
1992	7,262	4,406	495	914	2,683	314	2,856	1,027	1,285	494	50

*Includes prekindergarten and kindergarten enrollments in regular public schools and enrollments in independently operated public and private nursery schools and kindergartens.

NOTE—Details may not add to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports, Nursery School and Kindergarten Enrollment*, Series P-20; and U.S. Department of Education, National Center for Education Statistics, *Preprimary Enrollment*, various years.

Table B-2.—Enrollment in grades K-8 and 9-12 of regular day schools, with projections, by control of institution: 50 States and D.C., 1970 to 1992

(In thousands)

Year (fall)	Total public and private			Public			Private		
	K-12	K-8	9-12	K-12	K-8	9-12	K-12	K-8	9-12
1970	51,272	36,629	14,643	45,909	32,577	13,332	5,363	4,052	1,311
1971	51,281	36,165	15,116	46,081	32,265	13,816	5,200*	3,900	1,300
1972	50,744	35,531	15,213	45,744	31,831	13,913	5,000*	3,700	1,300
1973	50,430	35,053	15,377	45,429	31,353	14,077	5,000*	3,700	1,300
1974	50,053	34,621	15,432	45,053	30,921	14,132	5,000*	3,700	1,300
1975	49,791	34,187	15,604	44,791	30,487	14,304	5,000*	3,700	1,300
1976	49,484	33,831	15,653	44,317	30,006	14,311	5,167	3,825	1,342
1977	48,716	33,133	15,583	43,577	29,336	14,240	5,140	3,797	1,343
1978	47,636	32,060	15,576	42,550	28,328	14,223	5,085	3,732	1,353
1979	46,645	31,631	15,014	41,645	27,931	13,714	5,000*	3,700	1,300
1980	45,949	31,297	14,652	40,987	27,674	13,313	4,962	3,623	1,339
1981	45,200	30,945	14,255	40,099	27,245	12,855	5,100*	3,700	1,400
1982	44,743	30,843	13,901	39,643	27,143	12,501	5,100*	3,700	1,400
				Projected					
1983	44,231	30,610	13,621	39,131	26,910	12,221	5,100	3,700	1,400
1984	43,925	30,246	13,679	38,925	26,646	12,279	5,000	3,600	1,400
1985	43,977	30,236	13,741	38,977	26,636	12,341	5,000	3,600	1,400
1986	44,175	30,587	13,588	39,075	26,887	12,188	5,100	3,700	1,400
1987	44,173	30,993	13,180	39,173	27,293	11,880	5,000	3,700	1,300
1988	44,344	31,583	12,761	39,244	27,783	11,461	5,100	3,800	1,300
1989	44,644	32,209	12,435	39,444	28,309	11,135	5,200	3,900	1,300
1990	45,069	32,925	12,144	39,869	28,925	10,944	5,200	4,000	1,200
1991	45,641	33,457	12,184	40,441	29,457	10,984	5,200	4,000	1,200
1992	46,378	34,125	12,253	41,078	30,025	11,053	5,300	4,100	1,200

*Estimated.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of Public Elementary and Secondary Day Schools*, and *Statistics of Nonpublic Elementary and Secondary Schools*, various years.

Table B-2.1.—Total enrollment in grades K-8 and 9-12 of regular day schools, with alternative projections: 50 States and D.C., 1982 and 1992*

(In thousands)

Year (fall)	K-12	K-8	9-12
1982	44,744	30,843	13,901
(Based on U.S. Census Projections, Middle Series)			
1992	46,378	34,125	12,253
(Based on U.S. Census Projections, Lowest Series)			
1992	44,786	32,742	12,044
(Based on U.S. Census Projections, Highest Series)			
1992	47,463	35,105	12,358

*For methodological details, see table 6.1.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of Public Elementary and Secondary Day Schools* and *Statistics of Nonpublic Elementary and Secondary Schools*.

Table B-3.—Enrollment in regular elementary and secondary day schools with projections, by control and organizational level of institution: 50 States and D.C., 1970 to 1992

(In thousands)

Year (fall)	Total public and private			Public			Private		
	K-12	Elementary	Secondary	K-12	Elementary	Secondary	K-12	Elementary	Secondary
1970	51,272	31,553	19,719	45,909	27,501	18,408	5,363	4,052	1,311
1971	51,281	31,588	19,693	46,081	27,688	18,393	5,200*	3,900	1,300
1972	50,744	31,023	19,721	45,744	27,323	18,421	5,000*	3,700	1,300
1973	50,430	30,135	20,295	45,429	26,435	18,995	5,000*	3,700	1,300
1974	50,053	30,082	19,971	45,053	26,382	18,671	5,000*	3,700	1,300
1975	49,791	29,340	20,451	44,791	25,640	19,151	5,000*	3,700	1,300
1976	49,484	29,255	20,229	44,317	25,430	18,887	5,167	3,825	1,342
1977	48,716	28,751	19,966	43,577	24,954	18,623	5,140	3,797	1,343
1978	47,636	28,749	18,887	42,550	25,017	17,534	5,085	3,732	1,353
1979	46,645	28,243	18,402	41,645	24,543	17,102	5,000*	3,700	1,300
1980	45,949	27,779	18,170	40,987	24,156	16,831	4,962	3,623	1,339
1981	45,200	27,519	17,680	40,099	23,819	16,280	5,100*	3,700	1,400
1982	44,743	27,565	17,178	39,643	23,865	15,778	5,100*	3,700	1,400
				Projected					
1983	44,231	27,237	16,994	39,131	23,537	15,594	5,100	3,700	1,400
1984	43,925	27,018	16,907	38,925	23,418	15,507	5,000	3,600	1,400
1985	43,977	27,181	16,796	38,977	23,581	15,396	5,000	3,600	1,400
1986	44,175	27,616	16,559	39,075	23,916	15,159	5,100	3,700	1,400
1987	44,173	28,039	16,134	39,173	24,339	14,834	5,000	3,700	1,300
1988	44,344	28,653	15,691	39,244	24,853	14,391	5,100	3,800	1,300
1989	44,644	29,246	15,398	39,444	25,346	14,098	5,200	3,900	1,300
1990	45,069	29,907	15,162	39,869	25,907	13,962	5,200	4,000	1,200
1991	45,641	30,379	15,262	40,441	26,379	14,062	5,200	4,000	1,200
1992	46,378	30,885	15,493	41,078	26,785	14,293	5,300	4,100	1,200

*Estimated

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of Public Elementary and Secondary Day Schools* and *Statistics of Nonpublic Elementary and Secondary Schools*.

NOTE: Because of rounding, details may not add to totals.

Table B-4A.—Enrollment in all institutions of higher education, by age, sex, and attendance status of student, with intermediate alternative projections: 50 States and D.C., fall 1972, 1977, 1982, 1987 and 1992

(In thousands)

Age	Total	1972 (Estimated)		Total	1977 (Estimated)		Total	1982 (Estimated)		Total	1987 (Projected)		Total	1992 (Projected)	
		Full-time	Part-time		Full-time	Part-time		Full-time	Part-time		Full-time	Part-time		Full-time	Part-time
Total	9,215	6,072	3,142	11,286	6,793	4,493	12,426	7,221	5,204	12,136	6,566	5,570	11,810	6,152	5,658
14 to 17 years	278	263	14	254	221	33	233	210	23	214	192	22	186	166	19
18 to 19 years	2,568	2,373	193	2,705	2,389	316	2,726	2,384	342	2,372	2,096	277	2,133	1,885	249
20 to 21 years	2,054	1,779	275	2,270	1,929	341	2,540	2,085	454	2,078	1,721	356	2,010	1,665	345
22 to 24 years	1,501	900	602	1,764	1,056	707	2,081	1,227	853	1,939	1,162	777	1,734	1,040	694
25 to 29 years	1,330	477	854	1,844	710	1,135	1,995	768	1,227	2,117	770	1,346	1,933	704	1,230
30 to 34 years	586	157	429	1,038	254	784	1,262	299	963	1,432	330	1,102	1,526	352	1,174
35 years and over	898	123	775	1,411	234	1,177	1,589	248	1,340	1,984	295	1,690	2,289	340	1,947
Men	5,239	3,557	1,681	5,789	3,650	2,138	6,031	3,753	2,278	5,918	3,457	2,461	5,715	3,237	2,478
14 to 17 years	132	129	3	106	89	16	107	91	16	92	80	12	80	69	10
18 to 19 years	1,307	1,215	90	1,315	1,177	137	1,295	1,163	133	1,138	1,015	123	1,026	918	111
20 to 21 years	1,129	997	133	1,211	1,037	174	1,287	1,080	206	1,061	898	162	1,029	872	157
22 to 24 years	1,003	683	317	1,015	661	353	1,138	715	421	1,086	708	377	972	634	338
25 to 29 years	898	375	526	1,052	456	597	1,055	446	611	1,152	465	689	1,057	426	631
30 to 34 years	359	103	255	534	146	388	559	174	384	663	182	480	711	195	515
35 years and over	411	55	357	556	84	473	590	84	507	724	107	618	838	123	716
Women	3,976	2,514	1,461	5,497	3,142	2,354	6,394	3,468	2,927	6,218	3,109	3,109	6,095	2,915	3,180
14 to 17 years	145	134	10	147	131	16	126	119	6	122	111	10	105	96	9
18 to 19 years	1,261	1,161	103	1,393	1,210	179	1,432	1,224	208	1,234	1,081	154	1,108	969	138
20 to 21 years	923	781	141	1,060	892	167	1,253	1,005	248	1,016	823	194	980	793	187
22 to 24 years	500	216	283	749	395	353	943	511	431	852	454	398	762	406	355
25 to 29 years	431	102	330	792	254	538	939	321	619	965	305	658	876	277	598
30 to 34 years	227	53	173	503	108	395	703	125	579	769	147	621	815	156	658
35 years and over	487	67	421	854	150	706	998	163	836	1,260	188	1,074	1,449	216	1,235

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Fall Enrollment in Higher Education*, various years and U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, "School Enrollment-Social and Economic Characteristics of Students," Series P-20.

NOTE: Details may not add to totals because of rounding.

BEST COPY AVAILABLE

Table B-4B.—Enrollment in all institutions of higher education, by age, sex, and attendance status of student, with low alternative projections: 50 States and D.C., fall 1972, 1977, 1982, 1987 and 1992

(In thousands)

Age	Total	1972 (Estimated)		Total	1977 (Estimated)		Total	1982 (Estimated)		Total	1987 (Projected)		Total	1992 (Projected)	
		Full-time	Part-time		Full-time	Part-time		Full-time	Part-time		Full-time	Part-time		Full-time	Part-time
Total	9,215	6,072	3,142	11,286	6,793	4,493	12,426	7,221	5,204	11,655	6,322	5,332	11,030	5,768	5,262
14 to 17 years	278	263	14	254	221	33	233	210	23	180	158	22	133	114	19
18 to 19 years	2,568	2,373	193	2,705	2,389	316	2,726	2,384	342	2,283	2,017	265	1,995	1,762	234
20 to 21 years	2,054	1,779	275	2,270	1,929	341	2,540	2,085	454	2,025	1,675	350	1,931	1,593	339
22 to 24 years	1,501	900	602	1,764	1,056	707	2,081	1,227	853	1,876	1,112	764	1,646	967	679
25 to 29 years	1,330	477	854	1,844	710	1,135	1,995	768	1,227	2,056	752	1,302	1,827	674	1,153
30 to 34 years	586	157	429	1,038	254	784	1,262	299	963	1,307	322	984	1,307	334	972
35 years and over	898	123	775	1,411	234	1,177	1,589	248	1,340	1,928	286	1,642	2,189	324	1,864
Men	5,239	3,557	1,681	5,789	3,650	2,138	6,031	3,753	2,278	5,618	3,325	2,293	5,155	3,001	2,154
14 to 17 years	132	129	3	106	89	16	107	91	16	86	74	11	70	60	10
18 to 19 years	1,307	1,215	90	1,315	1,177	137	1,295	1,163	133	1,085	968	117	939	838	100
20 to 21 years	1,129	997	133	1,211	1,037	174	1,287	1,080	206	1,027	864	162	967	809	157
22 to 24 years	1,003	683	317	1,015	661	353	1,138	715	421	1,040	670	370	899	572	327
25 to 29 years	898	375	526	1,052	456	597	1,055	446	611	1,113	459	653	972	408	563
30 to 34 years	359	103	255	534	146	388	559	174	384	572	182	389	537	195	341
35 years and over	411	55	357	556	84	473	590	84	507	693	105	588	769	116	653
Women	3,976	2,514	1,461	5,497	3,142	2,354	6,394	3,468	2,927	6,036	2,997	3,038	5,874	2,767	3,107
14 to 17 years	145	134	10	147	131	16	126	119	6	94	83	10	62	53	9
18 to 19 years	1,261	1,161	103	1,393	1,210	179	1,432	1,224	208	1,196	1,047	148	1,057	922	133
20 to 21 years	923	781	141	1,060	892	167	1,253	1,005	248	998	810	189	963	782	181
22 to 24 years	500	216	283	749	395	353	943	511	431	835	442	393	747	395	351
25 to 29 years	431	102	330	792	254	538	939	321	619	941	292	648	855	265	589
30 to 34 years	227	53	173	503	108	395	703	125	579	734	139	595	769	139	630
35 years and over	487	67	421	854	150	706	998	163	836	1,235	181	1,053	1,419	208	1,211

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Fall Enrollment in Higher Education*, various years and U.S. Department of Commerce, Bureau of the Census *Current Population Reports*, "School Enrollment-Social and Economic Characteristics of Students," Series P-20.

NOTE: Details may not add to totals because of rounding.

BEST COPY AVAILABLE

Table B-4C.—Enrollment in all institutions of higher education, by age, sex, and attendance status of student, with high alternative projections: 50 States and D.C., fall 1972, 1977, 1982, 1987 and 1992

(In thousands)

Age	Total	1972 (Estimated)		Total	1977 (Estimated)		Total	1982 (Estimated)		Total	1987 (Projected)		Total	1992 (Projected)	
		Full-time	Part-time		Full-time	Part-time		Full-time	Part-time		Full-time	Part-time		Full-time	Part-time
Total	9,215	6,072	3,142	11,286	6,793	4,493	12,426	7,221	5,204	13,547	7,106	6,441	14,223	6,992	7,231
14 to 17 years	278	263	14	254	221	33	233	210	23	223	196	26	193	168	24
18 to 19 years	2,568	2,373	193	2,705	2,389	316	2,726	2,384	342	2,472	2,147	324	2,282	1,956	327
20 to 21 years	2,054	1,779	275	2,270	1,929	341	2,540	2,085	454	2,177	1,784	394	2,189	1,776	413
22 to 24 years	1,501	900	602	1,764	1,056	707	2,081	1,227	853	2,127	1,294	833	2,010	1,224	785
25 to 29 years	1,330	477	854	1,844	710	1,135	1,995	768	1,227	2,414	924	1,488	2,375	926	1,449
30 to 34 years	586	157	429	1,038	254	784	1,262	299	963	1,688	386	1,302	1,997	453	1,544
35 years and over	898	123	775	1,411	234	1,177	1,589	248	1,340	2,445	374	2,072	3,175	487	2,687
Men	5,239	3,557	1,681	5,789	3,650	2,138	6,031	3,753	2,278	6,231	3,607	2,623	6,169	3,411	2,757
14 to 17 years	132	129	3	106	89	16	107	91	16	99	84	15	86	71	15
18 to 19 years	1,307	1,215	90	1,315	1,177	137	1,295	1,163	133	1,172	1,023	149	1,067	916	151
20 to 21 years	1,129	997	133	1,211	1,037	174	1,287	1,080	206	1,074	899	175	1,051	871	179
22 to 24 years	1,003	683	317	1,015	661	353	1,138	715	421	1,123	736	386	1,010	655	354
25 to 29 years	898	375	526	1,052	456	597	1,055	446	611	1,223	530	691	1,141	505	634
30 to 34 years	359	103	255	534	146	388	559	174	384	702	201	501	774	230	544
35 years and over	411	55	357	556	84	473	590	84	507	836	132	704	1,038	161	878
Women	3,976	2,514	1,461	5,497	3,142	2,354	6,394	3,468	2,927	7,316	3,498	3,817	8,054	3,580	4,473
14 to 17 years	145	134	10	147	131	16	126	119	6	123	112	11	106	97	9
18 to 19 years	1,261	1,161	103	1,393	1,210	179	1,432	1,224	208	1,298	1,124	175	1,215	1,040	175
20 to 21 years	923	781	141	1,060	892	167	1,253	1,005	248	1,103	884	218	1,137	904	233
22 to 24 years	500	216	283	749	395	353	943	511	431	1,004	557	446	1,000	569	431
25 to 29 years	431	102	330	792	254	538	939	321	619	1,191	393	797	1,235	420	814
30 to 34 years	227	53	173	503	108	395	703	125	579	985	184	800	1,222	222	999
35 years and over	487	67	421	854	150	706	998	163	836	1,610	242	1,368	2,137	326	1,810

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Fall Enrollment in Higher Education*, various years and U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, "School Enrollment-Social and Economic Characteristics of Students," Series P-20.

NOTE: Details may not add to totals because of rounding.

BEST COPY AVAILABLE

Table B-5.—Total enrollment in all institutions of higher education, with alternative projections, by sex and attendance status of student and control of institution: 50 States and D.C., 1970 to 1992

(In thousands)

Year (fall)	Total enrollment	Sex		Attendance status		Control	
		Men	Women	Full-time	Part-time	Public	Private
1970	8,581	5,044	3,537	5,815	2,766	6,428	2,153
1971	8,949	5,207	3,742	6,077	2,871	6,804	2,144
1972	9,215	5,239	3,976	6,072	3,142	7,071	2,144
1973	9,602	5,371	4,231	6,189	3,413	7,420	2,183
1974	10,224	5,622	4,601	6,370	3,853	7,989	2,235
1975	11,185	6,149	5,036	6,841	4,344	8,835	2,350
1976	11,012	5,811	5,201	6,717	4,295	8,653	2,359
1977	11,286	5,789	5,497	6,793	4,493	8,847	2,437
1978	11,259	5,640	5,619	6,667	4,592	8,784	2,475
1979	11,570	5,683	5,887	6,793	4,776	9,037	2,533
1980	12,097	5,874	6,223	7,098	4,999	9,457	2,640
1981	12,372	5,975	6,397	7,181	5,190	9,647	2,724
1982	12,426	6,031	6,394	7,221	5,205	9,696	2,730
Intermediate alternative projections							
1983	12,377	6,074	6,303	7,066	5,311	9,681	2,696
1984	12,325	6,043	6,282	6,936	5,389	9,646	2,679
1985	12,247	5,996	6,251	6,790	5,457	9,591	2,656
1986	12,162	5,944	6,218	6,645	5,517	9,533	2,629
1987	12,136	5,918	6,218	6,566	5,570	9,518	2,618
1988	12,141	5,909	6,232	6,541	5,600	9,528	2,613
1989	12,161	5,908	6,253	6,524	5,637	9,548	2,613
1990	12,093	5,867	6,226	6,430	5,663	9,498	2,595
1991	11,989	5,805	6,184	6,303	5,686	9,419	2,570
1992	11,810	5,715	6,095	6,152	5,658	9,284	2,526
Low alternative projections							
1983	12,138	5,974	6,164	6,944	5,194	9,522	2,616
1984	12,031	5,897	6,134	6,786	5,245	9,443	2,588
1985	11,890	5,797	6,093	6,611	5,279	9,340	2,550
1986	11,746	5,698	6,048	6,436	5,310	9,236	2,510
1987	11,654	5,618	6,036	6,322	5,332	9,172	2,482
1988	11,593	5,553	6,040	6,263	5,330	9,130	2,463
1989	11,551	5,499	6,052	6,216	5,335	9,101	2,450
1990	11,424	5,404	6,020	6,095	5,329	9,003	2,421
1991	11,268	5,296	5,972	5,947	5,321	8,884	2,384
1992	11,032	5,157	5,875	5,769	5,263	8,705	2,327
High alternative projections							
1983	13,002	6,280	6,722	7,350	5,652	10,176	2,826
1984	13,140	6,272	6,868	7,283	5,857	10,295	2,845
1985	13,256	6,251	7,005	7,202	6,054	10,398	2,858
1986	13,372	6,227	7,145	7,123	6,249	10,503	2,869
1987	13,550	6,232	7,318	7,108	6,442	10,655	2,895
1988	13,759	6,252	7,507	7,148	6,611	10,830	2,929
1989	13,982	6,278	7,704	7,188	6,794	11,016	2,966
1990	14,119	6,265	7,854	7,157	6,962	11,132	2,987
1991	14,219	6,233	7,986	7,089	7,130	11,220	2,999
1992	14,224	6,169	8,055	6,993	7,231	11,235	2,989

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Fall Enrollment in Higher Education*, various years.
NOTE.-Details may not add to totals because of rounding.

Table B-5A.—Total enrollment in 4-year institutions of higher education, with alternative projections, by sex and attendance status of student and control of institution: 50 States and D.C., 1970 to 1992

(In thousands)

Year (fall)	Total enrollment	Sex		Attendance status		Control	
		Men	Women	Full-time	Part-time	Public	Private
1970	6,358	3,726	2,631	4,650	1,708	4,326	2,032
1971	6,463	3,758	2,705	4,787	1,676	4,438	2,024
1972	6,459	3,695	2,764	4,732	1,727	4,430	2,029
1973	6,590	3,718	2,872	4,757	1,833	4,530	2,060
1974	6,820	3,791	3,029	4,861	1,959	4,703	2,117
1975	7,215	3,984	3,231	5,080	2,134	4,998	2,217
1976	7,129	3,831	3,298	5,053	2,076	4,902	2,227
1977	7,242	3,823	3,419	5,138	2,104	4,945	2,297
1978	7,232	3,756	3,476	5,109	2,123	4,912	2,320
1979	7,353	3,761	3,592	5,202	2,151	4,980	2,373
1980	7,571	3,827	3,744	5,344	2,227	5,129	2,442
1981	7,655	3,851	3,805	5,385	2,270	5,166	2,489
1982	7,654	3,861	3,793	5,381	2,273	5,176	2,478
Intermediate alternative projections							
1983	7,553	3,947	3,606	5,327	2,226	5,107	2,446
1984	7,506	3,922	3,584	5,238	2,268	5,074	2,432
1985	7,437	3,884	3,553	5,132	2,305	5,026	2,411
1986	7,358	3,839	3,519	5,019	2,339	4,971	2,387
1987	7,317	3,810	3,507	4,950	2,367	4,942	2,375
1988	7,303	3,793	3,510	4,919	2,384	4,933	2,370
1989	7,306	3,785	3,521	4,902	2,404	4,936	2,370
1990	7,264	3,757	3,507	4,840	2,424	4,909	2,355
1991	7,195	3,716	3,479	4,758	2,437	4,862	2,333
1992	7,071	3,654	3,417	4,645	2,426	4,777	2,294
Low alternative projections							
1983	7,411	3,885	3,526	5,236	2,175	5,011	2,400
1984	7,330	3,832	3,498	5,127	2,203	4,954	2,376
1985	7,223	3,761	3,462	5,000	2,223	4,881	2,342
1986	7,108	3,688	3,420	4,866	2,242	4,802	2,306
1987	7,026	3,626	3,400	4,771	2,255	4,745	2,281
1988	6,974	3,576	3,398	4,716	2,258	4,712	2,262
1989	6,938	3,537	3,401	4,677	2,261	4,689	2,249
1990	6,860	3,475	3,385	4,595	2,265	4,637	2,223
1991	6,759	3,406	3,353	4,496	2,263	4,568	2,191
1992	6,598	3,313	3,285	4,363	2,235	4,459	2,139
High alternative projections							
1983	7,916	4,083	3,833	5,544	2,372	5,350	2,566
1984	7,970	4,070	3,900	5,503	2,467	5,385	2,585
1985	8,007	4,045	3,962	5,448	2,559	5,409	2,598
1986	8,035	4,015	4,020	5,384	2,651	5,427	2,608
1987	8,103	4,004	4,099	5,364	2,739	5,472	2,631
1988	8,198	4,003	4,195	5,382	2,816	5,536	2,662
1989	8,306	4,007	4,299	5,407	2,899	5,611	2,695
1990	8,374	3,994	4,380	5,393	2,981	5,658	2,716
1991	8,413	3,968	4,445	5,355	3,058	5,685	2,728
1992	8,385	3,919	4,466	5,284	3,101	5,665	2,720

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Fall Enrollment in Higher Education*, various years.
NOTE.-Details may not add to totals because of rounding.

Table B-5B.—Total enrollment in 2-year institutions of higher education, with alternative projections, by sex and attendance status of student and control of institution: 50 States and D.C., 1970 to 1992

(In thousands)

Year (fall)	Total enrollment	Sex		Attendance status		Control	
		Men	Women	Full-time	Part-time	Public	Private
1970	2,223	1,317	906	1,165	1,058	2,102	121
1971	2,486	1,449	1,037	1,291	1,195	2,366	120
1972	2,756	1,544	1,212	1,340	1,416	2,641	115
1973	3,012	1,653	1,360	1,432	1,580	2,890	122
1974	3,404	1,832	1,572	1,509	1,895	3,285	119
1975	3,970	2,165	1,805	1,761	2,209	3,836	134
1976	3,883	1,980	1,903	1,664	2,219	3,752	132
1977	4,042	1,965	2,077	1,654	2,388	3,902	140
1978	4,028	1,885	2,143	1,558	2,470	3,873	155
1979	4,217	1,922	2,295	1,592	2,625	4,057	160
1980	4,526	2,047	2,479	1,754	2,772	4,329	198
1981	4,716	2,124	2,592	1,796	2,920	4,481	236
1982	4,772	2,170	2,602	1,840	2,932	4,520	252
Intermediate alternative projections							
1983	4,824	2,127	2,697	1,739	3,085	4,574	250
1984	4,819	2,121	2,698	1,698	3,121	4,572	247
1985	4,810	2,112	2,698	1,658	3,152	4,565	245
1986	4,804	2,105	2,699	1,626	3,178	4,562	242
1987	4,819	2,108	2,711	1,616	3,203	4,576	243
1988	4,838	2,116	2,722	1,622	3,216	4,595	243
1989	4,855	2,123	2,732	1,622	3,233	4,612	243
1990	4,829	2,110	2,719	1,590	3,239	4,589	240
1991	4,794	2,089	2,705	1,545	3,249	4,557	237
1992	4,739	2,061	2,678	1,507	3,232	4,507	232
Low alternative projections							
1983	4,727	2,089	2,638	1,708	3,019	4,511	216
1984	4,701	2,065	2,636	1,659	3,042	4,489	212
1985	4,667	2,036	2,631	1,611	3,056	4,459	208
1986	4,638	2,010	2,628	1,570	3,068	4,434	204
1987	4,628	1,992	2,636	1,551	3,077	4,427	201
1988	4,619	1,977	2,642	1,547	3,072	4,418	201
1989	4,613	1,962	2,651	1,539	3,074	4,412	201
1990	4,564	1,929	2,635	1,500	3,064	4,366	198
1991	4,509	1,890	2,619	1,451	3,058	4,316	193
1992	4,434	1,844	2,590	1,406	3,028	4,246	188
High alternative projections							
1983	5,086	2,197	2,889	1,806	3,280	4,826	260
1984	5,170	2,202	2,968	1,780	3,390	4,910	260
1985	5,249	2,206	3,043	1,754	3,495	4,989	260
1986	5,337	2,212	3,125	1,739	3,598	5,076	261
1987	5,447	2,228	3,219	1,744	3,703	5,183	264
1988	5,561	2,249	3,312	1,766	3,795	5,294	267
1989	5,676	2,271	3,405	1,781	3,895	5,405	271
1990	5,745	2,271	3,474	1,764	3,981	5,474	271
1991	5,806	2,265	3,541	1,734	4,072	5,535	271
1992	5,839	2,250	3,589	1,709	4,130	5,570	269

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Fall Enrollment in Higher Education*, various years.
NOTE.-Details may not add to totals because of rounding.

Table B-6.—Total enrollment in all institutions of higher education, with alternative projections, by sex and attendance status: 50 States and D.C., 1970 to 1992

(In thousands)

Year (fall)	Total	Men		Women	
		Full-time	Part-time	Full-time	Part-time
1970	8,581	3,505	1,540	2,311	1,225
1971	8,949	3,630	1,578	2,447	1,293
1972	9,215	3,557	1,681	2,514	1,461
1973	9,602	3,579	1,792	2,612	1,621
1974	10,224	3,646	1,976	2,724	1,877
1975	11,185	3,926	2,222	2,915	2,120
1976	11,012	3,704	2,107	3,014	2,188
1977	11,286	3,650	2,138	3,142	2,354
1978	11,259	3,527	2,113	3,140	2,479
1979	11,570	3,543	2,140	3,251	2,636
1980	12,097	3,689	2,185	3,409	2,814
1981	12,372	3,713	2,262	3,468	2,928
1982	12,426	3,753	2,278	3,468	2,927
		Intermediate alternative projections			
1983	12,377	3,717	2,357	3,349	2,954
1984	12,325	3,654	2,389	3,282	3,000
1985	12,247	3,579	2,417	3,211	3,040
1986	12,162	3,503	2,441	3,142	3,076
1987	12,136	3,457	2,461	3,109	3,109
1988	12,141	3,438	2,471	3,103	3,129
1989	12,161	3,426	2,482	3,098	3,155
1990	12,093	3,378	2,489	3,052	3,174
1991	11,989	3,313	2,492	2,990	3,194
1992	11,810	3,237	2,478	2,915	3,180
		Low alternative projections			
1983	12,138	3,667	2,307	3,277	2,887
1984	12,031	3,585	2,312	3,201	2,933
1985	11,890	3,489	2,308	3,122	2,971
1986	11,746	3,394	2,304	3,042	3,006
1987	11,654	3,325	2,293	2,997	3,039
1988	11,593	3,282	2,271	2,981	3,059
1989	11,551	3,248	2,251	2,968	3,084
1990	11,424	3,178	2,226	2,917	3,103
1991	11,268	3,097	2,199	2,850	3,122
1992	11,032	3,002	2,155	2,767	3,108
		High alternative projections			
1983	13,002	3,846	2,434	3,504	3,218
1984	13,140	3,785	2,487	3,498	3,370
1985	13,256	3,717	2,534	3,485	3,520
1986	13,372	3,647	2,580	3,476	3,669
1987	13,550	3,608	2,624	3,500	3,818
1988	13,759	3,596	2,656	3,552	3,955
1989	13,982	3,585	2,693	3,603	4,101
1990	14,119	3,542	2,723	3,615	4,239
1991	14,219	3,483	2,750	3,606	4,380
1992	14,224	3,412	2,757	3,581	4,474

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Fall Enrollment in Higher Education*, various years.
NOTE.-Details may not add to totals because of rounding.

Table B-7.—Undergraduate enrollment in all institutions, with alternative projections, by sex and attendance status of student and control of institution: 50 States and D.C., 1970 to 1992

(In thousands)

Year (fall)	Total enrollment	Sex		Attendance status		Control	
		Men	Women	Full-time	Part-time	Public	Private
1970	7,376	4,254	3,122	5,280	2,096	5,628	1,748
1971	7,746	4,418	3,325	5,512	2,231	6,007	1,736
1972	7,941	4,429	3,512	5,488	2,453	6,223	1,718
1973	8,261	4,538	3,723	5,580	2,681	6,522	1,739
1974	8,798	4,765	4,033	5,726	3,072	7,031	1,767
1975	9,679	5,257	4,422	6,169	3,510	7,826	1,853
1976	9,429	4,902	4,527	6,030	3,399	7,617	1,812
1977	9,714	4,896	4,818	6,093	3,621	7,842	1,872
1978	9,684	4,760	4,923	5,962	3,721	7,786	1,898
1979	9,998	4,821	5,178	6,080	3,919	8,047	1,950
1980	10,475	5,000	5,475	6,362	4,113	8,441	2,032
1981	10,754	5,108	5,647	6,449	4,306	8,648	2,107
1982	10,825	5,170	5,654	6,483	4,341	8,713	2,112
Intermediate alternative projections							
1983	10,736	5,149	5,587	6,293	4,443	8,670	2,066
1984	10,649	5,095	5,554	6,144	4,505	8,609	2,040
1985	10,551	5,038	5,513	5,991	4,560	8,541	2,010
1986	10,447	4,977	5,470	5,840	4,607	8,471	1,976
1987	10,410	4,948	5,462	5,760	4,650	8,449	1,961
1988	10,417	4,942	5,475	5,742	4,675	8,460	1,957
1989	10,439	4,945	5,494	5,732	4,707	8,480	1,959
1990	10,371	4,909	5,462	5,647	4,724	8,429	1,942
1991	10,266	4,850	5,416	5,524	4,742	8,349	1,917
1992	10,096	4,766	5,330	5,377	4,719	8,219	1,877
Low alternative projections							
1983	10,520	5,052	5,468	6,173	4,347	8,522	1,998
1984	10,397	4,971	5,426	6,009	4,388	8,432	1,965
1985	10,245	4,870	5,375	5,829	4,416	8,322	1,923
1986	10,091	4,770	5,321	5,650	4,441	8,211	1,880
1987	10,001	4,698	5,303	5,541	4,460	8,148	1,853
1988	9,951	4,646	5,305	5,492	4,459	8,111	1,840
1989	9,921	4,605	5,316	5,456	4,465	8,089	1,832
1990	9,804	4,524	5,280	5,346	4,458	7,996	1,808
1991	9,656	4,428	5,228	5,205	4,451	7,881	1,775
1992	9,438	4,304	5,134	5,034	4,404	7,713	1,725
High alternative projections							
1983	11,221	5,289	5,932	6,497	4,724	9,104	2,117
1984	11,299	5,262	6,037	6,407	4,892	9,185	2,114
1985	11,354	5,223	6,131	6,301	5,053	9,248	2,106
1986	11,413	5,182	6,231	6,200	5,213	9,316	2,097
1987	11,541	5,175	6,366	6,168	5,373	9,435	2,106
1988	11,712	5,190	6,522	6,199	5,513	9,586	2,126
1989	11,899	5,214	6,685	6,233	5,666	9,747	2,152
1990	11,995	5,196	6,799	6,195	5,800	9,835	2,160
1991	12,055	5,159	6,896	6,117	5,938	9,896	2,159
1992	12,033	5,095	6,938	6,011	6,022	9,893	2,140

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Fall Enrollment in Higher Education*, various years.
NOTE.-Details may not add to totals because of rounding.

Table B-8.—Undergraduate enrollment in all institutions, with alternative projections, by sex and attendance status of student: 50 States and D.C., 1970 to 1992

(In thousands)

Year (fall)	Total	Men		Women	
		Full-time	Part-time	Full-time	Part-time
1970	7,376	3,097	1,157	2,183	939
1971	7,743	3,201	1,217	2,311	1,014
1972	7,941	3,121	1,308	2,367	1,145
1973	8,261	3,135	1,403	2,445	1,278
1974	8,798	3,191	1,574	2,535	1,498
1975	9,679	3,459	1,798	2,710	1,712
1976	9,429	3,242	1,660	2,788	1,739
1977	9,714	3,188	1,708	2,905	1,913
1978	9,684	3,068	1,692	2,894	2,029
1979	9,998	3,087	1,734	2,993	2,185
1980	10,475	3,227	1,773	3,135	2,340
1981	10,754	3,260	1,848	3,189	2,458
1982	10,825	3,299	1,871	3,184	2,470
		Intermediate alternative projections			
1983	10,736	3,230	1,919	3,063	2,524
1984	10,649	3,151	1,944	2,993	2,561
1985	10,551	3,072	1,966	2,919	2,594
1986	10,447	2,992	1,985	2,848	2,622
1987	10,410	2,947	2,001	2,813	2,649
1988	10,417	2,933	2,009	2,809	2,666
1989	10,439	2,926	2,019	2,806	2,688
1990	10,371	2,885	2,024	2,762	2,700
1991	10,266	2,823	2,027	2,701	2,715
1992	10,096	2,749	2,017	2,628	2,702
		Low alternative projections			
1983	10,520	3,172	1,880	3,001	2,467
1984	10,397	3,087	1,884	2,922	2,504
1985	10,245	2,989	1,881	2,840	2,535
1986	10,091	2,892	1,878	2,758	2,563
1987	10,001	2,828	1,870	2,713	2,590
1988	9,951	2,793	1,853	2,699	2,606
1989	9,921	2,767	1,838	2,689	2,627
1990	9,804	2,706	1,818	2,640	2,640
1991	9,656	2,631	1,797	2,574	2,654
1992	9,438	2,541	1,763	2,493	2,641
		High alternative projections			
1983	11,221	3,308	1,981	3,189	2,743
1984	11,299	3,239	2,023	3,168	2,869
1985	11,354	3,162	2,061	3,139	2,992
1986	11,413	3,085	2,097	3,115	3,116
1987	11,541	3,042	2,133	3,126	3,240
1988	11,712	3,031	2,159	3,168	3,354
1989	11,899	3,024	2,190	3,209	3,476
1990	11,995	2,983	2,213	3,212	3,587
1991	12,055	2,924	2,235	3,193	3,703
1992	12,033	2,853	2,242	3,158	3,780

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Fall Enrollment in Higher Education*, various years.
NOTE.-Details may not add to totals because of rounding.

Table B-8A.—Undergraduate enrollment in public institutions, with alternative projections, by sex and attendance status of student: 50 States and D.C., 1970 to 1992

(In thousands)

Year (fall)	Total	Men		Women	
		Full-time	Part-time	Full-time	Part-time
1970	5,628	2,294	947	1,594	793
1971	6,007	2,408	1,019	1,712	868
1972	6,223	2,352	1,115	1,761	995
1973	6,522	2,380	1,199	1,829	1,114
1974	7,031	2,433	1,366	1,909	1,323
1975	7,826	2,662	1,583	2,063	1,518
1976	7,617	2,471	1,478	2,115	1,553
1977	7,842	2,413	1,524	2,197	1,708
1978	7,786	2,302	1,510	2,161	1,813
1979	8,047	2,316	1,549	2,229	1,952
1980	8,441	2,426	1,588	2,334	2,093
1981	8,648	2,452	1,639	2,373	2,185
1982	8,713	2,488	1,653	2,373	2,201
		Intermediate alternative projections			
1983	8,701	2,434	1,699	2,285	2,283
1984	8,640	2,372	1,720	2,233	2,315
1985	8,572	2,312	1,739	2,178	2,343
1986	8,502	2,253	1,756	2,126	2,367
1987	8,480	2,220	1,769	2,101	2,390
1988	8,491	2,211	1,777	2,099	2,404
1989	8,511	2,206	1,786	2,097	2,422
1990	8,460	2,174	1,790	2,064	2,432
1991	8,380	2,126	1,793	2,017	2,444
1992	8,250	2,071	1,783	1,963	2,433
		Low alternative projections			
1983	8,522	2,388	1,664	2,238	2,232
1984	8,432	2,323	1,667	2,179	2,263
1985	8,322	2,250	1,664	2,118	2,290
1986	8,211	2,178	1,661	2,058	2,314
1987	8,148	2,131	1,654	2,026	2,337
1988	8,111	2,106	1,639	2,016	2,350
1989	8,089	2,087	1,626	2,009	2,367
1990	7,996	2,040	1,608	1,971	2,377
1991	7,881	1,982	1,590	1,920	2,389
1992	7,713	1,915	1,559	1,861	2,378
		High alternative projections			
1983	9,104	2,491	1,753	2,380	2,480
1984	9,185	2,439	1,791	2,364	2,591
1985	9,248	2,381	1,824	2,343	2,700
1986	9,316	2,324	1,856	2,327	2,809
1987	9,435	2,293	1,887	2,336	2,919
1988	9,586	2,286	1,911	2,369	3,020
1989	9,747	2,282	1,938	2,401	3,126
1990	9,835	2,250	1,959	2,402	3,224
1991	9,896	2,204	1,978	2,387	3,327
1992	9,893	2,151	1,984	2,362	3,396

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Fall Enrollment in Higher Education*, various years.
NOTE: Details may not add to totals because of rounding.

Table B-8B.—Undergraduate enrollment in private institutions, with alternative projections, by sex and attendance status: 50 States and D.C., 1970 to 1992

(In thousands)

Year (fall)	Total	Men		Women	
		Full-time	Part-time	Full-time	Part-time
1970	1,748	803	210	589	146
1971	1,736	793	198	599	146
1972	1,718	769	193	606	150
1973	1,739	755	204	616	164
1974	1,767	758	208	626	175
1975	1,853	797	215	647	194
1976	1,812	771	182	673	186
1977	1,872	775	184	708	205
1978	1,898	767	182	733	215
1979	1,950	772	184	762	233
1980	2,032	800	185	802	246
1981	2,107	809	209	816	272
1982	2,112	812	219	811	270
Intermediate alternative projections					
1983	2,035	796	220	778	241
1984	2,009	779	224	760	246
1985	1,979	760	227	741	251
1986	1,945	739	229	722	255
1987	1,930	727	232	712	259
1988	1,926	722	232	710	262
1989	1,928	720	233	709	266
1990	1,911	711	234	698	268
1991	1,886	697	234	684	271
1992	1,846	678	234	665	269
Low alternative projections					
1983	1,998	784	216	763	235
1984	1,965	764	217	743	241
1985	1,923	739	217	722	245
1986	1,880	714	217	700	249
1987	1,853	697	216	687	253
1988	1,840	687	214	683	256
1989	1,832	680	212	680	260
1990	1,808	666	210	669	263
1991	1,775	649	207	654	265
1992	1,725	625	204	632	263
High alternative projections					
1983	2,117	817	228	809	263
1984	2,114	800	232	804	278
1985	2,106	781	237	796	292
1986	2,097	761	241	788	307
1987	2,106	749	246	790	321
1988	2,126	745	248	799	334
1989	2,152	742	252	808	350
1990	2,160	733	254	810	363
1991	2,159	720	257	806	376
1992	2,140	702	258	796	384

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Fall Enrollment in Higher Education*, various years.
NOTE.-Details may not add to totals because of rounding.

Table B-9.—Graduate enrollment in all institutions, with alternative projections, by sex and attendance status of student and control of institution: 50 States and D.C., 1970 to 1992

(In thousands)

Year (fall)	Total enrollment	Sex		Attendance status		Control	
		Men	Women	Full-time	Part-time	Public	Private
1970	1,031	630	400	379	651	724	307
1971	1,012	615	396	388	623	712	300
1972	1,066	626	439	394	671	757	308
1973	1,123	648	477	410	715	799	324
1974	1,190	663	526	427	762	852	338
1975	1,263	700	563	453	810	906	357
1976	1,333	714	619	463	870	932	401
1977	1,318	700	617	472	845	900	416
1978	1,319	688	632	473	847	894	425
1979	1,309	669	640	476	833	884	425
1980	1,343	675	670	485	860	901	442
1981	1,343	674	669	484	859	887	456
1982	1,323	670	653	485	838	870	453
Intermediate alternative projections							
1983	1,348	714	634	506	842	891	457
1984	1,379	734	645	522	857	915	464
1985	1,398	743	655	528	870	928	470
1986	1,413	750	663	531	882	939	474
1987	1,424	753	671	533	891	945	479
1988	1,424	752	672	528	896	945	479
1989	1,425	750	675	524	901	946	479
1990	1,427	747	680	517	910	948	479
1991	1,430	746	684	515	915	950	480
1992	1,422	740	682	512	910	946	476
Low alternative projections							
1983	1,330	713	617	509	821	882	448
1984	1,342	715	627	511	831	891	451
1985	1,353	716	637	516	837	898	455
1986	1,362	716	646	519	843	905	457
1987	1,362	710	652	516	846	905	457
1988	1,353	700	653	509	844	901	452
1989	1,345	691	654	501	844	895	450
1990	1,341	681	660	496	845	893	448
1991	1,335	671	664	491	844	890	445
1992	1,319	658	661	486	833	879	440
High alternative projections							
1983	1,463	764	699	563	900	973	490
1984	1,516	779	737	580	936	1,007	509
1985	1,568	793	775	598	970	1,044	524
1986	1,618	807	811	613	1,005	1,078	540
1987	1,662	817	845	624	1,038	1,108	554
1988	1,696	822	874	630	1,066	1,131	565
1989	1,730	825	905	636	1,094	1,155	575
1990	1,770	831	939	642	1,128	1,182	588
1991	1,806	836	970	649	1,157	1,208	598
1992	1,831	836	995	657	1,174	1,225	606

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Fall Enrollment in Higher Education*, various years.
NOTE.-Details may not add to totals because of rounding.

Table B-10.—Graduate enrollment in all institutions, with alternative projections, by sex and attendance status of student: 50 States and D.C., 1970 to 1992

(In thousands)

Year (fall)	Total	Men		Women	
		Full-time	Part-time	Full-time	Part-time
1970	1,031	264	366	115	285
1971	1,012	269	346	119	277
1972	1,066	268	358	126	313
1973	1,123	273	375	137	340
1974	1,190	276	387	151	375
1975	1,263	290	410	163	400
1976	1,333	287	427	176	443
1977	1,318	289	411	183	434
1978	1,319	284	404	189	443
1979	1,309	280	389	196	444
1980	1,343	281	394	204	466
1981	1,343	277	397	207	462
1982	1,323	280	390	205	448
Intermediate alternative projections					
1983	1,348	294	420	212	422
1984	1,379	308	426	212	431
1985	1,398	311	432	217	438
1986	1,413	313	437	218	445
1987	1,424	313	440	220	451
1988	1,424	310	442	218	454
1989	1,425	307	443	217	458
1990	1,427	302	445	215	465
1991	1,430	301	445	214	470
1992	1,422	299	441	213	469
Low alternative projections					
1983	1,330	304	409	205	412
1984	1,342	305	410	206	421
1985	1,353	307	409	209	428
1986	1,362	308	408	211	435
1987	1,362	305	405	211	441
1988	1,353	300	400	209	444
1989	1,345	295	396	206	448
1990	1,341	290	391	206	454
1991	1,335	286	385	205	459
1992	1,319	283	375	203	458
High alternative projections					
1983	1,463	330	434	233	466
1984	1,516	335	444	245	492
1985	1,568	341	452	257	518
1986	1,618	345	462	268	543
1987	1,662	347	470	277	568
1988	1,696	346	476	284	590
1989	1,730	344	481	292	613
1990	1,770	343	488	299	640
1991	1,806	343	493	306	664
1992	1,831	343	493	314	681

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Fall Enrollment in Higher Education*, various years.
NOTE.-Details may not add to totals because of rounding.

Table B-10A.—Graduate enrollment in public institutions, with alternative projections, by sex and attendance status of student: 50 States and D.C., 1970 to 1992

(In thousands)

Year (fall)	Total	Men		Women	
		Full-time	Part-time	Full-time	Part-time
1970	724	175	248	81	220
1971	712	183	232	83	213
1972	757	182	245	87	243
1973	799	185	257	95	263
1974	852	189	265	106	292
1975	906	198	283	114	311
1976	932	190	287	120	334
1977	900	190	267	124	319
1978	894	183	258	127	326
1979	884	182	245	133	324
1980	901	180	246	137	337
1981	887	177	242	138	330
1982	870	180	237	136	317
Intermediate alternative projections					
1983	891	186	260	142	303
1984	915	199	264	143	309
1985	928	201	268	145	314
1986	939	202	271	146	320
1987	945	202	272	147	324
1988	945	200	273	146	326
1989	946	198	274	145	329
1990	948	195	275	144	334
1991	950	194	275	143	338
1992	946	193	273	143	337
Low alternative projections					
1983	882	196	253	137	296
1984	891	197	254	138	302
1985	898	198	253	140	307
1986	905	199	253	141	312
1987	905	197	251	141	316
1988	901	194	248	140	319
1989	895	190	245	138	322
1990	893	187	242	138	326
1991	890	185	238	137	330
1992	879	182	232	136	329
High alternative projections					
1983	973	213	269	156	335
1984	1,007	216	274	164	353
1985	1,044	220	280	172	372
1986	1,078	223	286	179	390
1987	1,108	224	291	185	408
1988	1,131	223	294	190	424
1989	1,155	222	298	195	440
1990	1,182	221	302	200	459
1991	1,208	221	305	205	477
1992	1,225	221	305	210	489

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Fall Enrollment in Higher Education*, various years.
NOTE.-Details may not add to totals because of rounding.

Table B-10B.—Graduate enrollment in private institutions, with alternative projections, by sex and attendance status of student: 50 States and D.C., 1970 to 1992

(In thousands)

Year (fall)	Total	Men		Women	
		Full-time	Part-time	Full-time	Part-time
1970	307	89	118	34	65
1971	300	86	114	36	64
1972	308	86	113	39	70
1973	324	88	118	42	77
1974	338	87	122	45	83
1975	357	92	127	49	89
1976	401	97	140	56	109
1977	416	98	144	59	115
1978	425	101	146	62	117
1979	425	98	144	63	119
1980	442	100	147	67	128
1981	456	100	155	68	132
1982	453	100	153	69	131
Intermediate alternative projections					
1983	457	108	160	70	119
1984	464	109	162	71	122
1985	470	110	164	72	124
1986	474	111	166	72	125
1987	479	111	168	73	127
1988	479	110	169	72	128
1989	479	109	169	72	129
1990	479	107	170	71	131
1991	480	107	170	71	132
1992	476	106	168	70	132
Low alternative projections					
1983	448	108	156	68	116
1984	451	108	156	68	119
1985	455	109	156	69	121
1986	457	109	155	70	123
1987	457	108	154	70	125
1988	452	106	152	69	125
1989	450	105	151	68	126
1990	448	103	149	68	128
1991	445	101	147	68	129
1992	440	101	143	67	129
High alternative projections					
1983	490	117	165	77	131
1984	509	119	170	81	139
1985	524	121	172	85	146
1986	540	122	176	89	153
1987	554	123	179	92	160
1988	565	123	182	94	166
1989	575	122	183	97	173
1990	588	122	186	99	181
1991	598	122	188	101	187
1992	606	122	188	104	192

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Fall Enrollment in Higher Education*, various years.
NOTE.-Details may not add to totals because of rounding.

Table B-11.—First-professional enrollment in all institutions, with alternative projections, by sex and attendance status of student and control of institution: 50 States and D.C., 1970 to 1992

(In thousands)

Year (fall)	Total enrollment	Sex		Attendance status		Control	
		Men	Women	Full-time	Part-time	Public	Private
1970	175	161	14	157	18	76	99
1971	194	175	19	177	17	86	108
1972	207	183	24	189	18	91	116
1973	218	185	33	201	17	97	121
1974	236	194	42	217	19	105	131
1975	245	195	50	219	26	105	140
1976	251	195	56	225	26	105	146
1977	251	191	60	226	25	103	148
1978	257	192	65	233	24	105	152
1979	263	193	70	239	24	106	157
1980	278	199	79	251	27	114	163
1981	275	193	81	248	26	112	163
1982	278	191	87	252	26	113	165
Intermediate alternative projections							
1983	293	211	82	267	26	120	173
1984	297	214	83	270	27	122	175
1985	298	215	83	271	27	122	176
1986	302	217	85	274	28	123	179
1987	302	217	85	273	29	124	178
1988	300	215	85	271	29	123	177
1989	297	213	84	268	29	122	175
1990	295	211	84	266	29	121	174
1991	293	209	84	264	29	120	173
1992	292	209	83	263	29	119	173
Low alternative projections							
1983	288	209	79	262	26	118	170
1984	292	211	81	266	26	120	172
1985	292	211	81	266	26	120	172
1986	293	212	81	267	26	120	173
1987	291	210	81	265	26	119	172
1988	289	207	82	262	27	118	171
1989	285	203	82	259	26	117	168
1990	279	199	80	253	26	114	165
1991	277	197	80	251	26	113	164
1992	275	195	80	249	26	113	162
High alternative projections							
1983	318	227	91	290	28	130	188
1984	325	231	94	296	29	134	191
1985	334	235	99	303	31	137	197
1986	341	238	103	310	31	140	201
1987	347	240	107	316	31	143	204
1988	351	240	111	319	32	144	207
1989	353	239	114	319	34	145	208
1990	354	238	116	320	34	146	208
1991	358	238	120	323	35	147	211
1992	360	238	122	325	35	148	212

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Fall Enrollment in Higher Education*, various years.
NOTE.-Details may not add to totals because of rounding.

Table B-12.—First-professional enrollment in all institutions, with alternative projections, by sex and attendance status of student: 50 States and D.C., 1970 to 1992

(In thousands)

Year (fall)	Total	Men		Women	
		Full-time	Part-time	Full-time	Part-time
1970	175	144	17	13	1
1971	194	160	15	17	2
1972	207	168	15	21	3
1973	218	171	14	30	3
1974	236	179	15	38	4
1975	245	177	18	42	8
1976	251	175	20	50	6
1977	251	173	18	53	7
1978	257	175	17	58	7
1979	263	176	17	63	7
1980	278	181	18	70	9
1981	275	175	18	73	8
1982	278	174	17	78	9
Intermediate alternative projections					
1983	293	193	18	74	8
1984	297	195	19	75	8
1985	298	196	19	75	8
1986	302	198	19	76	9
1987	302	197	20	76	9
1988	300	195	20	76	9
1989	297	193	20	75	9
1990	295	191	20	75	9
1991	293	189	20	75	9
1992	292	189	20	74	9
Low alternative projections					
1983	288	191	18	71	8
1984	292	193	18	73	8
1985	292	193	18	73	8
1986	293	194	18	73	8
1987	291	192	18	73	8
1988	289	189	18	73	9
1989	285	186	17	73	9
1990	279	182	17	71	9
1991	277	180	17	71	9
1992	275	178	17	71	9
High alternative projections					
1983	318	208	19	82	9
1984	325	211	20	85	9
1985	334	214	21	89	10
1986	341	217	21	93	10
1987	347	219	21	97	10
1988	351	219	21	100	11
1989	353	217	22	102	12
1990	354	216	22	104	12
1991	358	216	22	107	13
1992	360	216	22	109	13

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Fall Enrollment in Higher Education*, various years.
NOTE.-Details may not add to totals because of rounding.

Table B-12A.—First-professional enrollment in public institutions, with alternative projections, by sex and attendance status of student: 50 States and D.C., 1970 to 1992

(In thousands)

Year (fall)	Total	Men		Women	
		Full-time	Part-time	Full-time	Part-time
1970	76	66	4	6	0
1971	86	73	4	8	1
1972	91	76	3	10	2
1973	97	79	2	15	1
1974	105	81	4	19	1
1975	105	76	6	19	4
1976	105	76	5	23	1
1977	103	74	4	24	1
1978	105	75	3	26	1
1979	106	74	3	28	1
1980	114	78	3	32	2
1981	112	75	3	33	2
1982	113	73	3	35	2
Intermediate alternative projections					
1983	120	82	3	33	2
1984	122	83	3	34	2
1985	122	83	3	34	2
1986	123	84	3	34	2
1987	124	84	4	34	2
1988	123	83	4	34	2
1989	122	82	4	34	2
1990	121	81	4	34	2
1991	120	80	4	34	2
1992	119	80	4	33	2
Low alternative projections					
1983	118	81	3	32	2
1984	120	82	3	33	2
1985	120	82	3	33	2
1986	120	82	3	33	2
1987	119	81	3	33	2
1988	118	80	3	33	2
1989	117	79	3	33	2
1990	114	77	3	32	2
1991	113	76	3	32	2
1992	113	76	3	32	2
High alternative projections					
1983	130	88	3	37	2
1984	134	90	4	38	2
1985	137	91	4	40	2
1986	140	92	4	42	2
1987	143	93	4	44	2
1988	144	93	4	45	2
1989	145	92	4	46	3
1990	146	92	4	47	3
1991	147	92	4	48	3
1992	148	92	4	49	3

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Fall Enrollment in Higher Education*, various years.
NOTE.-Details may not add to totals because of rounding.

Table B-12B.—First-professional enrollment in private institutions, with alternative projections, by sex and attendance status of student: 50 States and D.C., 1970 to 1992

(In thousands)

Year (fall)	Total	Men		Women	
		Full-time	Part-time	Full-time	Part-time
1970	99	78	13	7	1
1971	108	87	11	9	1
1972	116	92	12	11	1
1973	121	92	12	15	2
1974	131	98	11	19	3
1975	140	101	12	23	4
1976	146	99	15	27	5
1977	148	99	15	30	5
1978	152	100	15	32	6
1979	157	102	14	35	6
1980	163	104	15	38	7
1981	163	101	15	40	7
1982	165	101	14	43	7
Intermediate alternative projections					
1983	173	111	15	41	6
1984	175	112	16	41	6
1985	176	113	16	41	6
1986	179	114	16	42	7
1987	178	113	16	42	7
1988	177	112	16	42	7
1989	175	111	16	41	7
1990	174	110	16	41	7
1991	173	109	16	41	7
1992	173	109	16	41	7
Low alternative projections					
1983	170	110	15	39	6
1984	172	111	15	40	6
1985	172	111	15	40	6
1986	173	112	15	40	6
1987	172	111	15	40	6
1988	171	109	15	40	7
1989	168	107	14	40	7
1990	165	105	14	39	7
1991	164	104	14	39	7
1992	162	102	14	39	7
High alternative projections					
1983	188	120	16	45	7
1984	191	121	16	47	7
1985	197	123	17	49	8
1986	201	125	17	51	8
1987	204	126	17	53	8
1988	207	126	17	55	9
1989	208	125	18	56	9
1990	208	124	18	57	9
1991	211	124	18	59	10
1992	212	124	18	60	10

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Fall Enrollment in Higher Education*, various years.
NOTE.- Because of rounding, details may not add to totals.

Table B-13.—Full-time-equivalent enrollment in all institutions of higher education, by enrollment level of student and type of institution, with alternative projections: 50 States and D.C., 1970 to 1992

(In thousands)

Year (fall)	Total	Undergraduate		Graduate		First-professional	
		4-year	2-year	4-year	2-year	4-year	2-year
1970	6,737	4,458	1,518	599	0	163	0
1971	7,149	4,632	1,719	613	0	185	0
1972	7,254	4,587	1,847	622	0	198	0
1973	7,453	4,560	2,014	669	0	210	0
1974	7,805	4,670	2,199	710	0	226	0
1975	8,481	4,914	2,579	756	2	229	0
1976	8,313	4,838	2,461	780	1	234	2
1977	8,415	4,919	2,479	775	1	240	0
1978	8,335	4,899	2,409	776	1	249	0
1979	8,487	4,990	2,470	777	1	250	0
1980	8,749	5,108	2,589	791	0	261	0
1981	9,012	5,188	2,764	801	0	261	0
1982	9,092	5,194	2,842	788	0	267	0
		Intermediate alternative projections					
1983	8,954	5,080	2,781	813	0	280	0
1984	8,852	4,982	2,752	834	0	283	0
1985	8,730	4,879	2,722	845	0	284	0
1986	8,607	4,768	2,699	852	0	288	0
1987	8,547	4,705	2,697	858	0	287	0
1988	8,533	4,685	2,708	855	0	285	0
1989	8,529	4,681	2,713	852	0	282	0
1990	8,445	4,632	2,684	849	0	280	0
1991	8,326	4,557	2,642	848	0	278	0
1992	8,165	4,446	2,598	844	0	277	0
		Low alternative projections					
1983	8,790	4,980	2,727	808	0	275	0
1984	8,650	4,872	2,686	814	0	279	0
1985	8,488	4,745	2,643	821	0	279	0
1986	8,324	4,612	2,606	826	0	280	0
1987	8,218	4,526	2,590	824	0	278	0
1988	8,158	4,482	2,584	817	0	275	0
1989	8,113	4,456	2,577	809	0	272	0
1990	7,990	4,386	2,534	804	0	266	0
1991	7,840	4,294	2,483	799	0	264	0
1992	7,641	4,161	2,428	790	0	262	0
		High alternative projections					
1983	9,359	5,250	2,913	891	0	304	0
1984	9,365	5,209	2,924	921	0	310	0
1985	9,354	5,151	2,934	952	0	318	0
1986	9,345	5,087	2,954	979	0	325	0
1987	9,399	5,071	2,994	1,002	0	331	0
1988	9,499	5,099	3,047	1,018	0	335	0
1989	9,605	5,138	3,096	1,035	0	336	0
1990	9,633	5,136	3,108	1,053	0	337	0
1991	9,625	5,106	3,109	1,071	0	340	0
1992	9,565	5,035	3,103	1,085	0	342	0

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Fall Enrollment in Higher Education*, various years.
NOTE.-Because of rounding, details may not add to totals.

Table B-13A.—Full-time-equivalent enrollment in public institutions of higher education, by enrollment level of student and type of institution, with alternative projections: 50 States and D.C., 1970 to 1992

(In thousands)

Year (fall)	Total	Undergraduate		Graduate		First-professional	
		4-year	2-year	4-year	2-year	4-year	2-year
1970	4,953	3,053	1,413	414	0	73	0
1971	5,344	3,219	1,613	427	0	85	0
1972	5,453	3,187	1,747	431	0	88	0
1973	5,630	3,158	1,909	467	0	96	0
1974	5,945	3,245	2,097	501	0	102	0
1975	6,523	3,428	2,465	530	2	98	0
1976	6,350	3,369	2,348	534	1	99	2
1977	6,396	3,416	2,356	522	1	101	0
1978	6,270	3,372	2,277	516	1	103	0
1979	6,393	3,438	2,332	517	1	104	0
1980	6,574	3,524	2,416	524	0	111	0
1981	6,778	3,576	2,572	524	0	109	0
1982	6,851	3,597	2,630	513	0	111	0
		Intermediate alternative projections					
1983	6,736	3,515	2,574	530	0	117	0
1984	6,661	3,445	2,549	548	0	119	0
1985	6,570	3,374	2,522	555	0	119	0
1986	6,480	3,298	2,502	560	0	120	0
1987	6,438	3,254	2,500	563	0	121	0
1988	6,433	3,241	2,511	561	0	120	0
1989	6,433	3,238	2,516	560	0	119	0
1990	6,371	3,205	2,490	558	0	118	0
1991	6,278	3,153	2,451	557	0	117	0
1992	6,159	3,076	2,412	555	0	116	0
		Low alternative projections					
1983	6,636	3,443	2,548	530	0	115	0
1984	6,530	3,367	2,511	535	0	117	0
1985	6,409	3,281	2,472	539	0	117	0
1986	6,289	3,190	2,439	543	0	117	0
1987	6,213	3,130	2,425	542	0	116	0
1988	6,173	3,100	2,420	538	0	115	0
1989	6,141	3,083	2,413	532	0	114	0
1990	6,048	3,034	2,374	529	0	111	0
1991	5,933	2,970	2,327	526	0	110	0
1992	5,786	2,879	2,277	520	0	110	0
		High alternative projections					
1983	7,042	3,630	2,699	586	0	127	0
1984	7,049	3,602	2,711	605	0	131	0
1985	7,044	3,562	2,722	626	0	134	0
1986	7,042	3,519	2,742	645	0	137	0
1987	7,088	3,508	2,780	660	0	140	0
1988	7,170	3,527	2,831	671	0	141	0
1989	7,256	3,556	2,878	682	0	141	0
1990	7,280	3,554	2,890	694	0	142	0
1991	7,276	3,534	2,892	707	0	143	0
1992	7,234	3,485	2,889	716	0	144	0

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Fall Enrollment in Higher Education*, various years.
NOTE.-Because of rounding, details may not add to totals.

Table B-13B.—Full-time-equivalent enrollment in private institutions of higher education, by enrollment level of student and type of institution, with alternative projections: 50 States and D.C., 1970 to 1992

(In thousands)

Year (fall)	Total	Undergraduate		Graduate		First-professional	
		4-year	2-year	4-year	2-year	4-year	2-year
1970	1,784	1,407	105	184	0	89	0
1971	1,804	1,412	106	186	0	100	0
1972	1,801	1,400	100	191	0	110	0
1973	1,824	1,403	106	201	0	114	0
1974	1,861	1,425	102	208	0	124	0
1975	1,958	1,486	114	226	0	131	0
1976	1,963	1,469	113	246	0	135	0
1977	2,018	1,503	123	253	0	139	0
1978	2,066	1,527	133	258	0	146	0
1979	2,095	1,552	137	259	0	146	0
1980	2,175	1,586	172	267	0	150	0
1981	2,234	1,612	192	277	0	152	0
1982	2,241	1,597	213	276	0	155	0
		Intermediate alternative projections					
1983	2,218	1,565	207	283	0	163	0
1984	2,191	1,537	203	287	0	164	0
1985	2,160	1,505	200	290	0	165	0
1986	2,127	1,470	197	292	0	168	0
1987	2,109	1,450	197	295	0	167	0
1988	2,100	1,444	197	293	0	166	0
1989	2,097	1,443	197	293	0	164	0
1990	2,075	1,427	194	291	0	163	0
1991	2,048	1,404	191	291	0	162	0
1992	2,007	1,370	186	289	0	162	0
		Low alternative projections					
1983	2,154	1,537	179	278	0	160	0
1984	2,120	1,504	175	279	0	162	0
1985	2,078	1,464	171	282	0	162	0
1986	2,035	1,422	167	283	0	163	0
1987	2,005	1,396	164	283	0	162	0
1988	1,986	1,382	164	279	0	160	0
1989	1,972	1,373	164	277	0	158	0
1990	1,942	1,352	161	275	0	155	0
1991	1,906	1,324	156	273	0	154	0
1992	1,855	1,282	151	270	0	152	0
		High alternative projections					
1983	2,317	1,621	214	305	0	177	0
1984	2,316	1,607	213	316	0	180	0
1985	2,311	1,588	212	325	0	185	0
1986	2,303	1,568	212	334	0	189	0
1987	2,311	1,563	214	342	0	192	0
1988	2,329	1,571	216	348	0	194	0
1989	2,348	1,583	218	353	0	195	0
1990	2,353	1,582	218	359	0	195	0
1991	2,350	1,572	217	364	0	197	0
1992	2,331	1,550	214	369	0	198	0

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Fall Enrollment in Higher Education*, various years.
NOTE.-Because of rounding, details may not add to totals.

Table B-14.—High school graduates and general educational development degrees, with projections, by sex of recipient and control of institution: 50 States and D.C., 1970–71 to 1992–93

(In thousands)

Year	Total High School Graduates (Excluding General Educational Development degrees)	Sex		Control		General Educational Development degrees
		Boys	Girls	Public	Private (estimated)	
1970–71	2,937	1,454	1,483	2,637	300	
1971–72	3,001	1,487	1,514	2,699	302	
1972–73	3,036	1,500	1,536	2,730	306	
1973–74	3,074	1,512	1,562	2,763	310	294
1974–75	3,133	1,542	1,591	2,823	310	340
1975–76	3,148	1,569	1,579	2,837	311	333
1976–77	3,154	1,547	1,607	2,840	315	332
1977–78	3,127	1,531	1,596	2,825	302	381
1978–79	3,101	1,516	1,585	2,801	300	426
1979–80	3,043	1,491	1,552	2,748	295	479
1980–81	3,020	1,483	1,537	2,725	295	491
1981–82	3,001*	1,474	1,527	2,711	290	492
			Projected			
1982–83	2,916	1,451	1,465	2,626	290	500
1983–84	2,741	1,366	1,375	2,469	272	490
1984–85	2,656	1,321	1,335	2,393	263	480
1985–86	2,595	1,292	1,303	2,338	257	480
1986–87	2,663	1,326	1,337	2,399	264	470
1987–88	2,739	1,366	1,373	2,467	272	490
1988–89	2,742	1,368	1,374	2,450	292	500
1989–90	2,491	1,242	1,249	2,244	247	490
1990–91	2,408	1,200	1,208	2,169	239	480
1991–92	2,323	1,159	1,164	2,093	230	460
1992–93	2,378	1,187	1,191	2,142	236	450

*Preliminary.

NOTE.-Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Educational Statistics, *Statistics of Public Elementary and Secondary Day Schools*, various years, *Statistics of Nonpublic Elementary and Secondary Schools; Public High School Graduates, 1980–81*, Bulletin, 1983.

Table B-15.—Bachelor's degrees, with alternative projections, by sex of recipient: 50 States and D.C., 1970–71 to 1992–93

Year	Total	Men	Women
1970–71	839,730	475,594	364,136
1971–72	887,273	500,590	386,683
1972–73	922,362	518,191	404,171
1973–74	945,776	527,313	418,463
1974–75	922,933	504,841	418,092
1975–76	925,746	504,925	420,821
1976–77	919,549	495,545	424,004
1977–78	921,204	487,347	433,857
1978–79	921,390	477,344	444,046
1979–80	929,417	473,611	455,806
1980–81	935,140	469,883	465,257
1981–82	952,998	473,364	479,634
	Intermediate alternative projections		
1982–83	970,000	480,000	490,000
1983–84	970,000	485,000	485,000
1984–85	960,000	480,000	480,000
1985–86	945,000	470,000	475,000
1986–87	935,000	465,000	470,000
1987–88	927,000	462,000	465,000
1988–89	927,000	462,000	465,000
1989–90	927,000	462,000	465,000
1990–91	922,000	460,000	462,000
1991–92	915,000	456,000	459,000
1992–93	900,000	449,000	451,000
	Low alternative projections		
1982–83	950,000	470,000	480,000
1983–84	944,000	480,000	464,000
1984–85	918,000	470,000	448,000
1985–86	882,000	450,000	432,000
1986–87	856,000	440,000	416,000
1987–88	834,000	434,000	400,000
1988–89	828,000	434,000	394,000
1989–90	822,000	434,000	388,000
1990–91	806,000	430,000	376,000
1991–92	786,000	422,000	364,000
1992–93	750,000	408,000	342,000
	High alternative projections		
1982–83	990,000	490,000	500,000
1983–84	996,000	490,000	506,000
1984–85	1,002,000	490,000	512,000
1985–86	1,008,000	490,000	518,000
1986–87	1,014,000	490,000	524,000
1987–88	1,020,000	490,000	530,000
1988–89	1,026,000	490,000	536,000
1989–90	1,032,000	490,000	542,000
1990–91	1,038,000	490,000	548,000
1991–92	1,044,000	490,000	554,000
1992–93	1,050,000	490,000	560,000

SOURCE: U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey, *Earned Degrees Conferred by Institutions of Higher Education*, unpublished tabulations, November 1983.

Table B-16.—Master's degrees, with alternative projections, by sex of recipient: 50 States and D.C., 1970–71 to 1992–93

Year	Total	Men	Women
1970–71	230,509	138,146	92,363
1971–72	251,633	149,550	102,083
1972–73	263,371	154,468	108,903
1973–74	277,033	157,842	119,191
1974–75	292,450	161,570	130,880
1975–76	311,771	167,248	144,523
1976–77	317,164	167,783	149,381
1977–78	311,620	161,212	150,408
1978–79	301,079	153,370	147,709
1979–80	298,081	150,749	147,332
1980–81	295,739	147,043	148,696
1981–82	295,546	145,532	150,014
Intermediate alternative projections			
1982–83	295,000	143,000	152,000
1983–84	296,000	143,000	153,000
1984–85	295,000	141,000	154,000
1985–86	294,000	139,000	155,000
1986–87	292,000	138,000	154,000
1987–88	291,000	138,000	153,000
1988–89	289,000	137,000	152,000
1989–90	289,000	137,000	152,000
1990–91	287,000	136,000	151,000
1991–92	287,000	136,000	151,000
1992–93	285,000	135,000	150,000
Low alternative projections			
1982–83	292,000	141,000	151,000
1983–84	291,000	141,000	150,000
1984–85	286,000	137,000	149,000
1985–86	281,000	133,000	148,000
1986–87	274,000	131,000	143,000
1987–88	269,000	131,000	138,000
1988–89	262,000	129,000	133,000
1989–90	259,000	129,000	130,000
1990–91	252,000	127,000	125,000
1991–92	249,000	127,000	122,000
1992–93	242,000	125,000	117,000
High alternative projections			
1982–83	298,000	145,000	153,000
1983–84	301,000	145,000	156,000
1984–85	304,000	145,000	159,000
1985–86	307,000	145,000	162,000
1986–87	310,000	145,000	165,000
1987–88	313,000	145,000	168,000
1988–89	316,000	145,000	171,000
1989–90	319,000	145,000	174,000
1990–91	322,000	145,000	177,000
1991–92	325,000	145,000	180,000
1992–93	328,000	145,000	183,000

SOURCE: U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey, *Earned Degrees Conferred by Institutions of Higher Education*, unpublished tabulations, November 1983.

Table B-17.—Doctor's degrees, with alternative projections, by sex of recipient: 50 States and D.C., 1970–71 to 1992–93

Year	Total	Men	Women
1970–71	32,107	27,530	4,577
1971–72	33,363	28,090	5,273
1972–73	34,777	28,571	6,206
1973–74	33,816	27,365	6,451
1974–75	34,083	26,817	7,266
1975–76	34,064	26,267	7,797
1976–77	33,232	25,142	8,090
1977–78	32,131	23,658	8,473
1978–79	32,730	23,541	9,189
1979–80	32,615	22,943	9,672
1980–81	32,958	22,711	10,247
1981–82	32,707	22,224	10,483
Intermediate alternative projections			
1982–83	32,700	22,000	10,700
1983–84	33,000	21,700	11,300
1984–85	33,200	21,400	11,800
1985–86	33,400	21,100	12,300
1986–87	32,600	19,700	12,900
1987–88	32,800	19,400	13,400
1988–89	33,100	19,100	14,000
1989–90	32,800	18,300	14,500
1990–91	33,200	18,100	15,100
1991–92	33,400	17,800	15,600
1992–93	33,600	17,500	16,100
Low alternative projections			
1982–83	32,300	21,800	10,500
1983–84	31,700	21,200	10,500
1984–85	31,100	20,600	10,500
1985–86	30,500	20,000	10,500
1986–87	27,700	17,200	10,500
1987–88	27,100	16,600	10,500
1988–89	26,500	16,000	10,500
1989–90	24,900	14,400	10,500
1990–91	24,500	14,000	10,500
1991–92	23,900	13,400	10,500
1992–93	23,300	12,800	10,500
High alternative projections			
1982–83	33,100	22,200	10,900
1983–84	34,300	22,200	12,100
1984–85	35,300	22,200	13,100
1985–86	36,300	22,200	14,100
1986–87	37,500	22,200	15,300
1987–88	38,500	22,200	16,300
1988–89	39,700	22,200	17,500
1989–90	40,700	22,200	18,500
1990–91	41,900	22,200	19,700
1991–92	42,900	22,200	20,700
1992–93	43,900	22,200	21,700

SOURCE: U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey, *Earned Degrees Conferred by Institutions of Higher Education*, and unpublished tabulations, November 1983.

Table B-18.—First-Professional degrees, with alternative projections, by sex of recipient: 50 States and D.C., 1970–71 to 1992–93

Year	Total	Men	Women
1970–71	37,946	35,544	2,402
1971–72	43,411	40,723	2,688
1972–73	50,018	46,489	4,529
1973–74	53,816	48,530	5,286
1974–75	55,916	48,956	6,960
1975–76	62,649	52,892	9,757
1976–77	63,359	52,374	10,985
1977–78	66,581	52,270	14,311
1978–79	68,848	52,652	16,196
1979–80	70,131	52,716	17,415
1980–81	71,956	52,792	19,164
1981–82	72,032	52,223	19,809
Intermediate alternative projections			
1982–83	72,500	51,500	21,000
1983–84	73,500	51,500	22,000
1984–85	73,700	50,700	23,000
1985–86	73,500	50,200	23,300
1986–87	73,400	49,900	23,500
1987–88	70,200	47,100	23,100
1988–89	68,900	46,300	22,600
1989–90	68,300	45,500	22,800
1990–91	67,800	44,900	22,900
1991–92	67,800	44,900	22,900
1992–93	67,800	44,900	22,900
Low alternative projections			
1982–83	71,400	50,800	20,600
1983–84	71,800	50,500	21,300
1984–85	71,400	49,500	21,900
1985–86	70,600	48,800	21,800
1986–87	70,000	48,300	21,700
1987–88	64,800	43,100	21,700
1988–89	63,700	41,900	21,800
1989–90	62,400	40,600	21,800
1990–91	61,600	39,700	21,900
1991–92	61,600	39,700	21,900
1992–93	61,600	39,700	21,900
High alternative projections			
1982–83	73,600	52,200	21,400
1983–84	75,200	52,500	22,700
1984–85	76,000	51,900	24,100
1985–86	76,400	51,600	24,800
1986–87	76,800	51,500	25,300
1987–88	75,600	51,100	24,500
1988–89	74,100	50,700	23,400
1989–90	74,200	50,400	23,800
1990–91	74,000	50,100	23,900
1991–92	74,000	50,100	23,900
1992–93	74,000	50,100	23,900

SOURCE: U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey, *Earned Degrees Conferred by Institutions of Higher Education*, and unpublished tabulations, November 1983.

Table B-19.—Classroom teachers in regular elementary and secondary schools, with alternative projections, by control and level of institution: 50 States and D.C., fall 1970 to 1992

(In thousands)

Year (fall)	Total			Public			Private		
	K-12	Elementary	Secondary	K-12	Elementary	Secondary	K-12	Elementary	Secondary
1970	2,288	1,281	1,007	2,055	1,128	927	[1]233	153	80
1971	2,293	1,263	1,030	2,063	1,111	952	[1]230	152	78
1972	2,334	1,294	1,040	2,103	1,140	963	[1]231	154	77
1973	2,369	1,306	1,063	2,133	1,149	984	[1]236	157	79
1974	2,410	1,331	1,079	2,166	1,167	998	[1]245	164	81
1975	2,451	1,352	1,099	2,196	1,180	1,016	[1]255	172	83
1976	2,454	1,349	1,105	2,186	1,166	1,020	269	183	85
1977	2,488	1,375	1,113	2,209	1,185	1,024	278	190	89
1978	2,478	1,375	1,103	2,207	1,190	1,016	273	185	87
1979	2,459	1,378	1,081	2,183	1,190	993	[1]276	188	88
1980[1]	2,439	1,365	1,074	2,162	1,177	985	277	188	89
1981	2,403	1,349	1,054	2,117	1,155	962	[1]286	194	92
1982	2,401	1,362	1,039	[2]2,110	1,165	945	[1]291	197	94
Intermediate alternative projections									
1983	2,404	1,362	1,042	2,108	1,163	945	296	199	97
1984	2,401	1,358	1,043	2,108	1,162	946	293	196	97
1985	2,413	1,371	1,042	2,119	1,174	945	294	197	97
1986	2,438	1,403	1,035	2,135	1,198	937	303	205	98
1987	2,452	1,433	1,019	2,151	1,227	924	301	206	95
1988	2,468	1,472	996	2,162	1,258	904	306	214	92
1989	2,493	1,510	983	2,179	1,288	891	314	222	92
1990	2,527	1,550	977	2,209	1,321	888	318	229	89
1991	2,569	1,584	985	2,253	1,353	900	316	231	85
1992	2,624	1,618	1,006	2,299	1,379	920	325	239	86

[1]Estimated.

[2]Preliminary.

NOTE: Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of Public Elementary and Secondary Day Schools*, *Statistics of Nonpublic Elementary and Secondary Schools*, various years.

Table B-19.—Classroom teachers in regular elementary and secondary schools, with alternative projections, by control and level of institution: 50 States and D.C., fall 1970 to 1992, (Continued)

(In thousands)

Year (fall)	Total			Public			Private		
	K-12	Elementary	Secondary	K-12	Elementary	Secondary	K-12	Elementary	Secondary
				Low alternative projections					
1983	2,383	1,350	1,033	2,090	1,153	937	293	197	96
1984	2,367	1,339	1,028	2,079	1,147	932	288	192	96
1985	2,368	1,347	1,021	2,080	1,155	925	288	192	96
1986	2,376	1,369	1,007	2,083	1,172	911	293	197	96
1987	2,375	1,390	985	2,085	1,193	892	290	197	93
1988	2,375	1,421	954	2,083	1,218	865	292	203	89
1989	2,386	1,450	936	2,089	1,242	847	297	208	89
1990	2,407	1,482	925	2,108	1,269	839	299	213	86
1991	2,433	1,506	927	2,138	1,293	845	295	213	82
1992	2,472	1,531	941	2,171	1,312	859	301	219	82
				High alternative projections					
1983	2,423	1,373	1,050	2,125	1,172	953	298	201	97
1984	2,435	1,377	1,058	2,138	1,178	960	297	199	98
1985	2,465	1,399	1,066	2,163	1,196	967	302	203	99
1986	2,499	1,436	1,063	2,188	1,224	964	311	212	99
1987	2,528	1,474	1,054	2,215	1,258	957	313	216	97
1988	2,555	1,520	1,035	2,236	1,295	941	319	225	94
1989	2,596	1,568	1,028	2,266	1,333	933	330	235	95
1990	2,650	1,621	1,029	2,313	1,376	937	337	245	92
1991	2,707	1,663	1,044	2,369	1,414	955	338	249	89
1992	2,777	1,705	1,072	2,429	1,446	983	348	259	89

[1]Estimated

[2]Preliminary.

NOTE: Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of Public Elementary and Secondary Day Schools*; *Statistics of Nonpublic Elementary and Secondary Schools*, various years.

Table B-20.—Teachers per 1,000 pupils in regular elementary and secondary schools with alternative projections by control and level of institution: 50 States and D.C., 1970 to 1992

Year (fall)	Public		Private	
	Elementary	Secondary	Elementary	Secondary
1970	41.0	50.4	37.8	61.0
1971	40.1	51.8	39.4	61.3
1972	41.7	52.3	41.1	61.7
1973	43.5	51.8	42.7	62.1
1974	44.2	53.5	44.6	62.5
1975	46.0	53.1	46.2	62.9
1976	45.9	54.0	47.8	63.3
1977	47.5	55.0	50.0	66.3
1978	47.6	57.9	49.6	64.3
1979	48.5	58.1	51.1	65.4
1980	48.7	58.5	51.9	66.5
1981	48.5	59.1	52.3	67.2
1982	48.8	59.9	53.3	68.7
Intermediate alternative projections				
1983	49.4	60.6	53.8	69.0
1984	49.6	61.0	54.4	69.2
1985	49.8	61.4	54.8	69.6
1986	50.1	61.8	55.3	69.8
1987	50.4	62.3	55.8	70.2
1988	50.6	62.8	56.3	70.4
1989	50.8	63.2	56.8	70.7
1990	51.0	63.6	57.2	71.0
1991	51.3	64.0	57.8	71.2
1992	51.5	64.4	58.2	71.6
Low alternative projections				
1983	49.0	60.1	53.3	68.7
1984	49.0	60.1	53.3	68.7
1985	49.0	60.1	53.3	68.7
1986	49.0	60.1	53.3	68.7
1987	49.0	60.1	53.3	68.7
1988	49.0	60.1	53.3	68.7
1989	49.0	60.1	53.3	68.7
1990	49.0	60.1	53.3	68.7
1991	49.0	60.1	53.3	68.7
1992	49.0	60.1	53.3	68.7
High alternative projections				
	49.8	61.1	54.4	69.3
1984	50.3	61.9	55.4	69.8
1985	50.7	62.8	56.4	70.4
1986	51.2	63.6	57.3	71.0
1987	51.7	64.5	58.3	71.6
1988	52.1	65.4	59.3	72.1
1989	52.6	66.2	60.2	72.7
1990	53.1	67.1	61.2	73.3
1991	53.6	67.9	62.2	73.8
1992	54.0	68.8	63.1	74.4

Note: Ratios for 1970 through 1982 are based on the number of teachers in table B-19 and the enrollment in table B-3.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of Public Elementary and Secondary Day Schools*, various years; *Statistics of Nonpublic Elementary and Secondary Schools*.

Table B-21.—Estimated demand for classroom teachers in regular public elementary and secondary schools, with alternative projections: 50 States and D.C., 1970 to 1992

(In thousands)

Year (fall)	Total teacher demand	Demand for additional teachers			
		Total	For enrollment changes	For teacher-pupil ratio changes	For teacher turnover
1970	2,055	192	15	26	151
1971	2,063	152	7	1	144
1972	2,103	164	− 13	53	124
1973	2,133	156	− 8	36	126
1974	2,165	160	− 18	50	128
1975	2,196	161	− 7	38	130
1976	2,186	122	− 23	13	132
1977	2,209	154	− 35	58	131
1973-77	---	753	− 91	195	647
1978	2,206	129	− 57	54	132
1979	2,183	109	− 48	25	132
1980	2,162	110	− 33	12	131
1981	2,117	85	− 48	3	130
1982	2,110	120	− 28	21	128
1978-82	---	553	−214	115	653
		Intermediate alternative projections			
1983	2,108	125	− 27	25	127
1984	2,108	127	− 11	11	127
1985	2,119	138	1	10	127
1986	2,135	143	3	13	127
1987	2,151	144	1	15	128
1983-87	---	677	− 33	74	636
1988	2,162	140	− 1	12	129
1989	2,179	146	5	12	129
1990	2,209	160	19	11	130
1991	2,253	176	30	14	132
1992	2,299	181	36	10	135
1988-92	---	803	89	59	655
		Low alternative projections			
1983	2,090	81	− 20	0	101
1984	2,079	89	− 11	0	100
1985	2,080	101	1	0	100
1986	2,083	102	3	0	99
1987	2,085	102	2	0	100
1983-87	---	475	− 25	0	500
1988	2,083	98	− 2	0	100
1989	2,089	106	6	0	100
1990	2,108	120	19	0	101
1991	2,138	131	30	0	101
1992	2,171	136	33	0	103
1988-92	---	591	86	0	505

Table B-21.—Estimated demand for classroom teachers in regular public elementary and secondary schools, with alternative projections: 50 States and D.C., 1970 to 1992, (Continued)

(In thousands)

Year (fall)	Total teacher demand	Demand for additional teachers			
		Total	For enrollment changes	For teacher-pupil ratio changes	For teacher turnover
		High alternative projections			
1983	2,125	184	− 20	35	169
1984	2,138	183	− 11	24	170
1985	2,163	196	1	24	171
1986	2,188	198	2	23	173
1987	2,215	202	1	26	175
1983-87	—	963	− 27	132	858
1988	2,236	199	− 2	23	178
1989	2,266	209	6	24	179
1990	2,313	229	20	27	182
1991	2,369	205	− 4	24	185
1992	2,429	193	− 18	22	189
1988-92	—	1,035	2	120	913

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of Public Elementary and Secondary Schools*, various years.
NOTE: Details may not add to totals because of rounding.

Table B-22.—Estimated demand for classroom teachers in regular private elementary and secondary schools, with alternative projections: 50 States and D.C., 1970 to 1992

(In thousands)

Year (fall)	Total teacher demand	Demand for additional teachers			
		Total	For enrollment changes	For teacher-pupil ratio changes	For teacher turnover
1970	233	16	− 8	10	14
1971	230	11	− 9	6	14
1972	231	15	− 6	7	14
1973	236	19	− 2	7	14
1974	245	23	2	7	14
1975	255	25	3	7	15
1976	269	28	6	7	15
1977	278	27	− 2	13	16
1973-77	—	122	7	41	74
1978	273	9	− 3	− 4	16
1979	276	20	− 3	7	16
1980	277	17	− 3	4	16
1981	286	25	6	3	16
1982	291	23	− 1	6	18
1978-82	—	94	− 4	16	82

Table B-22.—Estimated demand for classroom teachers in regular private elementary and secondary schools, with alternative projections: 50 States and D.C., 1970 to 1992, (Continued)

(In thousands)

Year (fall)	Total teacher demand	Demand for additional teachers			
		Total	For enrollment changes	For teacher-pupil ratio changes	For teacher turnover
		Intermediate alternative projections			
1983	296	23	2	3	18
1984	293	15	− 5	2	18
1985	294	19	0	1	18
1986	303	27	6	3	18
1987	301	16	− 4	2	18
1983-87	---	100	− 1	11	90
1988	306	24	2	3	19
1989	314	27	6	2	19
1990	318	23	1	3	19
1991	316	19	− 2	2	19
1992	325	28	6	3	19
1988-92	---	121	13	13	95
		Low alternative projections			
1983	293	16	2	0	14
1984	288	9	− 5	0	14
1985	288	14	0	0	14
1986	293	19	5	0	14
1987	290	11	− 3	0	14
1983-87	---	69	− 1	0	70
1988	292	17	3	0	14
1989	297	19	5	0	14
1990	299	16	2	0	14
1991	295	10	− 4	0	14
1992	301	21	6	0	15
1988-92	---	83	12	0	71
		High alternative projections			
1983	298	31	2	5	24
1984	297	23	− 5	4	24
1985	302	29	0	5	24
1986	311	34	6	3	25
1987	313	27	− 3	5	25
1983-87	---	144	0	22	122
1988	319	32	2	4	26
1989	330	38	6	5	27
1990	337	35	2	5	28
1991	338	28	− 4	5	27
1992	348	38	6	4	28
1988-92	---	171	12	23	136

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Private Schools in American Education, 1981* and *Statistics of Nonpublic Elementary and Secondary Schools*, various years.

NOTE: Because of rounding, details may not add to totals.

Table B-23.—Estimated supply of new teacher graduates compared to estimated total demand for additional teachers in regular elementary and secondary schools, with alternative projections: 50 States and D.C., 1970 to 1992

(In thousands)

Year (fall)	Estimated supply of new teacher graduates	Estimated demand for additional teachers	Supply as a percent of demand
1970	284	208	136.5
1971	314	163	192.6
1972	317	179	177.1
1973	313	175	178.9
1974	279	183	152.5
1975	238	186	128.0
1976	222	150	148.0
1977	194	181	107.2
1973-77	1,246	875	142.4
1978	181	138	131.2
1979	163	129	126.4
1980	144	127	113.4
1981	141	110	128.2
1982	143	143	100.0
1978-82	772	647	119.3
Intermediate alternative projections			
1983	146	148	98.6
1984	146	142	102.8
1985	144*	157	91.7
1986	142*	170	83.5
1987	140*	160	87.5
1983-87	718*	777	92.4
1988	139	164	84.8
1989	139	173	80.3
1990	139	183	76.0
1991	138	195	70.8
1992	137	209	65.6
1988-92	692	924	74.9
Low alternative supply projections-high alternative demand projections			
1983	132	215	61.4
1984	126	206	61.2
1985	121	225	53.8
1986	115	232	49.6
1987	110	229	48.0
1983-87	604	1,107	54.6
1988	107	231	46.3
1989	105	247	42.5
1990	102	264	38.6
1991	100	233	42.9
1992	99	231	42.9
1988-92	513	1,206	42.5
High alternative supply projections-low alternative demand projections			
1983	155	97	159.8
1984	160	98	163.3
1985	163	115	141.7
1986	165	121	136.4
1987	168	113	148.7
1983-87	811	544	149.1
1988	171	115	148.7
1989	176	125	140.8
1990	181	136	133.1
1991	184	141	130.5
1992	188	157	119.7
1988-92	900	674	133.5

*Revised since previously published.

SOURCE: National Education Association, *Teacher Supply and Demand in Public Schools, 1982-83*.

Table B-24.—Full-time and part-time senior instructional staff[1] in all institutions of higher education, with alternative projections, by control and type of institution: 50 States and D.C., 1970 to 1992

(In thousands)

Year (fall)	Total	Employment status		Control		Type	
		Full-time	Part-time	Public	Private	4-year	2-year
1970	474	369	104	314	160	382	92
1971[2]	492	379	113	333	159	387	105
1972	500	380	120	343	157	384	116
1973[2]	527	389	138	365	162	401	126
1974[2]	567	406	161	397	170	427	140
1975[2]	628	440	188	443	185	467	161
1976	633	434	199	450	183	467	166
1977[2]	656	445	211	468	188	483	173
1978[2]	656	441	215	467	189	485	171
1979	675	445	230	488	187	494	182
1980[2]	696	458	238	502	193	506	190
1981[2]	716	470	246	518	198	513	202
1982[2]	721	472	249	523	198	513	208
Intermediate alternative projections							
1983	711	465	246	516	195	507	204
1984	703	460	243	510	192	501	202
1985	694	454	240	504	190	494	200
1986	684	447	237	497	187	485	198
1987	678	443	235	493	185	480	198
1988	677	442	235	493	184	478	199
1989	677	442	235	493	184	478	199
1990	670	437	233	488	182	473	197
1991	661	431	230	481	180	467	194
1992	648	423	225	472	176	457	191
Low alternative projections							
1983	698	457	241	507	191	498	200
1984	687	450	237	499	188	490	197
1985	674	441	233	490	185	480	194
1986	661	432	229	480	181	470	191
1987	652	426	226	474	178	462	190
1988	648	423	225	471	176	458	190
1989	644	420	224	469	175	455	189
1990	634	414	220	462	172	448	186
1991	622	406	216	453	169	440	182
1992	607	396	211	442	165	428	178
High alternative projections							
1983	742	486	256	538	205	529	213
1984	743	486	257	538	205	529	214
1985	743	486	257	538	204	528	215
1986	741	484	257	538	204	525	216
1987	745	486	259	541	204	526	219
1988	753	491	262	547	206	530	223
1989	761	496	265	554	208	535	227
1990	764	498	266	556	208	536	228
1991	763	497	266	555	208	535	228
1992	759	494	265	552	206	531	227

[1]Faculty members with the title of professor, associate professor, assistant professor, instructor, lecturer, assistant professor, adjunct professor, or interim professor (or its equivalent). Excluded are graduate students with titles such as graduate or teaching fellow who assist senior staff.

[2]Estimated.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Employees in Institutions of Higher Education*, Equal Employment Opportunity Commission, *Survey of Staff in Institutions of Higher Education* (1979), and unpublished NCES tabulations.

Table B-25.—Full-time-equivalent senior instructional staff[1] in all institutions of higher education, with alternative projections, by control and type of institution: 50 States and D.C., 1970 to 1992

(In thousands)

Year (fall)	Estimated total full-time-equivalent	Full-time	Full-time-equivalent of part-time	Estimated total full-time equivalent			
				Control		Type	
				Public	Private	4-year	2-year
1970	402	369	33	271	131	333	68
1971[2]	414	379	35	283	130	336	78
1972	417	380	37	290	128	332	86
1973[2]	433	389	44	304	130	345	89
1974[2]	457	406	51	326	130	364	93
1975[2]	501	440	61	358	144	397	104
1976	501	434	67	359	141	394	106
1977[2]	516	445	71	370	145	405	110
1978[2]	513	441	72	367	146	404	109
1979	523	445	77	376	147	410	113
1980[2]	538	458	80	387	151	420	118
1981[2]	552	470	83	397	155	426	126
1982[2]	555	472	83	401	155	426	130
Intermediate alternative projections							
1983	548	465	82	395	152	421	127
1984	541	460	81	391	150	416	126
1985	534	454	80	385	148	409	124
1986	526	447	79	380	146	402	123
1987	522	443	79	377	145	399	123
1988	521	442	79	377	144	397	124
1989	520	442	79	376	144	397	124
1990	515	437	78	373	142	393	123
1991	508	431	77	367	141	387	121
1992	498	423	75	360	138	379	119
Low alternative projections							
1983	538	457	81	388	150	413	125
1984	529	450	79	382	147	406	123
1985	519	441	78	375	144	398	121
1986	509	432	77	367	141	390	119
1987	502	426	76	363	139	384	118
1988	498	423	75	360	138	380	118
1989	495	420	75	358	137	377	118
1990	487	414	73	353	135	372	116
1991	478	406	72	346	132	365	113
1992	466	396	70	337	129	355	111
High alternative projections							
1983	572	486	86	412	160	439	133
1984	572	486	86	412	160	439	133
1985	571	486	85	412	160	437	134
1986	570	484	86	411	159	435	135
1987	573	486	87	413	160	436	137
1988	579	491	88	418	161	440	139
1989	585	496	89	423	162	443	141
1990	586	498	88	424	163	445	142
1991	586	497	89	424	162	444	142
1992	582	494	88	421	161	440	142

[1]Faculty members with the title of professor, associate professor, assistant professor, instructor, lecturer, assisting professor, adjunct professor, or interim professor (or its equivalent). Excluded are graduate students with titles such as graduate or teaching fellow who assist senior staff.
[2]Estimated.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Employees in Institutions of Higher Education*, Equal Employment Opportunity Commission, *Survey of Staff in Institutions of Higher Education* (1979), and unpublished NCES tabulations.

APPENDIX C

Glossary

Degrees

Bachelor's or First-level Degree

Lowest degree conferred by a college, university, or professional school requiring 4 or more years of academic work.

Doctor's Degree (except First-professional)

Highest academic degree conferred by a university, including Ph.D. in any field, doctor of education, doctor of juridical science, and doctor of public health (preceded by professional degree in medicine or sanitary engineering).

First-professional Degree

An academic degree which requires at least 2 academic years of previous college work for entrance and at least 6 academic years of college work for completion. This classification includes only degrees in the following fields of study: Law (LL.B. or J.D.); dentistry (D.D.S. or D.M.D.); medicine (M.D.); veterinary medicine (D.V.M.); chiropody or podiatry (D.S.C. or D.P.); optometry (O.D.); osteopathy (D.O.); theology (B.D.); chiropractic (D.C. or D.C.M.); and pharmacy (D.Phar.).

Master's or Second-level Degree

An academic degree higher than a bachelor's but lower than doctor's. All degrees classified as first-professional are excluded.

Enrollment

First-professional Enrollment

The enrollment in programs leading to a first-professional degree.

Full-time-equivalent Enrollment

The enrollment of full-time students plus the enrollment of part-time students converted to the equivalent number of full-time students.

Full-time Enrollment

The enrollment of students taking courses with credits equal to at least 75 percent of the normal full-time semester course load.

Fourth Year and Beyond Undergraduate Enrollment

The enrollment of undergraduate students who have completed 3 or more years toward a bachelor's degree.

Graduate Enrollment

The enrollment of students who have attained at least one bachelor's or first-professional degree and who are enrolled in courses creditable toward a master's or doctor's degree.

Non-credit Enrollment

The enrollment of students who receive no credit toward a formal degree or award. This enrollment is excluded from the enrollment in institutions of higher education shown in *Projections*.

Post-Baccalaureate Enrollment

Graduate enrollment plus first-professional enrollment.

Unclassified Enrollment

The enrollment of students taking courses creditable toward a degree or other formal award but who are not enrolled in such programs.

Undergraduate Enrollment

The enrollment of students taking courses creditable toward a bachelor's degree or other formal award below the bachelor's degree level.

Instructional Staff

Instructor or Above

A faculty member with the title of professor, associate professor, assistant professor, instructor, lecturer, visiting professor, adjunct professor, or interim professor (or its equivalent).

Full-time-equivalent Instructional Staff

All full-time instructional staff plus part-time instructional staff converted to the equivalent number of full-time instructional staff.

New Teacher Graduates

Bachelor's or master's degree recipients who are qualified to teach for the first time.

Schools

Elementary Schools

Schools with teaching primarily organized by grades, composed of a span of grades not above grade eight.

Independent Nursery and Kindergarten Schools

Schools that offer nursery and/or kindergarten instruction only.

Institutions of Higher Education

Postsecondary institutions that are legally authorized to offer at least a 1-year program of college-level studies leading toward a degree.

Secondary Schools

Schools with teaching organized by subject-matter taught, composed of junior high and high schools.